

Annual efficiency and finance assessment of Network Rail 2009-10

September 2010

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Executive Summary

- 1. This document provides our efficiency and financial assessment of Network Rail for 2009-10, the first year of control period 4 (CP4). Its purpose is to provide our assessment of Network Rail's efficiency and financial performance for Network Rail's customers, funders and other interested parties.
- We have assessed Network Rail efficiency improvement, and assessed whether it is operating within the financial boundaries established by our 2008 periodic review (PR08). We have compared Network Rail's performance in 2009-10 against our PR08 determination and in some cases with Network Rail's own 2009 budget and actual 2008-09 figures.

Expenditure

3. Tables 1, 2 and 3 provide a summary of the key expenditure information for Great Britain (GB), England & Wales and Scotland for 2009-10.

Table 1: Expenditure for GB for 2009-10 (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	Variance
Expenditure			
Controllable opex	991	843	-148
Non-controllable opex	434	354	-80
Maintenance	1,071	1,111	40
Renewals	2,304	3,039	735
Sub-total (opex, maintenance and renewals)	4,800	5,347	547
Enhancements (PR08 determination)	1,050	1,780	730
Enhancements (non- PR08 determination)	541	-	-541
Total enhancements	1,591	1,780	189
Schedule 4& 8	149	183	34
Total expenditure	6,540	7,310	769

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Control period 4 covers the period from 1 April 2009 to 31 March 2014.

Table 2: Expenditure for England & Wales for 2009-10 (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	Variance
Expenditure			
Controllable opex	896	767	-129
Non-controllable opex	402	326	-76
Maintenance	979	1,005	26
Renewals	2,078	2,702	624
Sub-total (opex, maintenance and renewals)	4,355	4,800	445
Enhancements (PR08 determination)	877	1,604	727
Enhancements (non- PR08 determination)	520	-	-520
Total enhancements	1,397	1,604	207
Schedule 4& 8	138	172	34
Total expenditure	5,890	6,576	686

Table 3: Expenditure for Scotland for 2009-10 (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	Variance
Expenditure			
Controllable opex	95	76	-19
Non-controllable opex	32	28	-4
Maintenance	92	106	14
Renewals	226	337	111
Sub-total (opex, maintenance and renewals)	445	547	102
Enhancements (PR08 determination)	173	176	3
Enhancements (non- PR08 determination)	21	-	-21
Total enhancements	194	176	-18
Schedule 4&8	11	11	0
Total expenditure	650	733	83

- 4. The key expenditure variances in 2009-10 compared to our PR08 determination were:
 - (a) controllable opex of £991m was £148m (17.6%) higher than our PR08 determination largely due to lower than expected improvements in efficiency over the last three years compared to our PR08 determination assumption, i.e. Network Rail exited CP3 in a worse position than we assumed. Some one-off transformation programme costs and actual inflation in 2009-10 being lower than that assumed in Network Rail's 2009-10 pay award (resulting in a real increase in wage costs) also contributed to the higher spend than we assumed;²

² The effect of this variance is expected by Network Rail to reverse in 2010-11, based on its latest forecast of RPI.

- (b) renewals expenditure of £2,304m was £735m (24.2%) lower than our PR08 determination and was largely due to the deferral of work to later in CP4 (£687m)³ and additional efficiency improvement (compared to our PR08 determination); and
- (c) enhancements expenditure in 2009-10 for schemes funded by our PR08 determination was £1,050m. This was £730m (41.0%) lower than our PR08 determination and is largely due to deferral of spend to later in CP4. Enhancements spend on projects not funded by our PR08 determination was £541m. Therefore, total expenditure on enhancements was £1,591m.

Efficiency

5. Tables 4, 5 and 6 provide the summary efficiency analysis for GB, England & Wales and Scotland for 2009-10.

Table 4: Analysis of efficiency for GB for 2009-10

	Year-on-year economic efficiency	PR08 determination	PR08 determination assumption
Controllable opex	-3.6%	-14.4%	2.8%
Maintenance	2.3%	6.7%	3.2%
Renewals	7.1%	7.1%	5.0%
Total (OMR)	3.6%	2.8%	3.8%

Table 5: Analysis of efficiency for England & Wales for 2009-10

Table 6. Analysis of emolency for England & Wales for 2005 for					
	Year-on-year economic efficiency	PR08 determination	PR08 determination assumption		
Controllable opex	-3.5%	-13.7%	2.8%		
Maintenance	2.5%	5.7%	3.2%		
Renewals	7.0%	7.0%	5.0%		
Total (OMR)	3.7%	2.6%	3.8%		

³ Some of this deferral was planned by Network Rail in its CP4 delivery plan.

Table 6: Analysis of efficiency for Scotland for 2009-10

•	Year-on-year economic efficiency	PR08 determination	PR08 determination assumption
Controllable opex	-3.6%	-21.5%	2.8%
Maintenance	0.7%	16.0%	3.2%
Renewals	7.4%	7.4%	5.0%
Total (OMR)	3.5%	4.3%	3.8%

- 6. We have agreed with Network Rail that we will use a new approach to measuring 'year-on-year economic efficiency' compared to an agreed baseline. We also compare Network Rail's efficiency to the assumptions we made in PR08.
- 7. Network Rail has made 'year-on-year economic efficiency' of 3.6% compared to 2008-09. Compared to our PR08 determination Network Rail made efficiency savings of 2.8%, which was lower than we assumed in our PR08 determination but was better than Network Rail's own 2009 budget.
- 8. The difference in efficiency between the 'year-on-year economic efficiency' and the performance against our PR08 determination was largely due to Network Rail exiting control period 3 in a worse position than we assumed in our PR08 determination and that Network Rail has not yet implemented its harmonisation of its maintenance employee's terms and conditions.
- 9. It can be difficult to distinguish between a deferral of renewals activity and efficiency, considered over a single year. This is particularly the case for 2009-10, when the asset policies were being revised by Network Rail and only accepted by us as robust and sustainable after the year end. Although Network Rail has presented us with further analysis on its renewal activity and the categorisation of volume reductions between deferral and efficiency, there remains a degree of uncertainty about this. For the purpose of this annual assessment, we have included renewals efficiency in our calculations of total efficiency. However, our assessment of renewals efficiency for 2009-10 remains indicative until later in CP4.

Finance

10. Tables 7 and 8 provide summary key financial information for GB, England & Wales and Scotland for 2009-10.

Table 7: Regulatory asset base (RAB) at 31 March 2010 (£m, nominal prices)

	A et :: el 2000 40	PR08	Variones
	Actual 2009-10	determination	Variance
GB	35,729	37,006	1,277
England & Wales	32,057	33,212	1,155
Scotland	3,672	3,794	122

Table 8: Regulatory net debt at 31 March 2010 (£m, nominal prices)

		PR08	
	Actual 2009-10	determination	Variance
GB	22,819	24,087	1,268
England & Wales	20,521	21,667	1,146
Scotland	2,298	2,420	122

11. At 31 March 2010, Network Rail's regulatory asset base (RAB) was £35,729m. This was £1,277m lower than our PR08 determination largely due to underspends on renewals (£751m) and enhancement expenditure (£741m) offset by investment framework projects (£215m). At 31 March 2010, Network Rail's net debt was £22,819m. This was £1,268m lower than our PR08 determination assumption largely due to the deferral of renewals and enhancements expenditure mentioned above.

1. Introduction

Purpose of the document

- 1.1 This document provides our efficiency and financial assessment of Network Rail for 2009-10, which was the first year of control period 4 (CP4). The purpose of this document is to provide our summary of Network Rail's efficiency and financial performance for Network Rail's customers, funders and other interested parties.
- 1.2 We monitor whether Network Rail is achieving the expected efficiencies in operating, maintenance, renewal and enhancement expenditure and whether it is operating within the financial boundaries set by our PR08 determination. We have therefore compared information and data received from Network Rail (and other sources) against our PR08 determination and in some cases with Network Rail's own 2009 budget and actual 2008-09 figures.
- 1.3 The information contained in this report has been compiled from a range of sources, including Network Rail's 2010 annual return⁵ and Network Rail's 2009-10 regulatory accounts,⁶ independent reporter reports and our PR08 determination.⁷
- 1.4 In 2008-09, we revised the way we monitor Network Rail. Most of the areas covered in previous annual assessments, including safety risk, train performance, asset performance and planning are now included in our Network Rail Q4 monitor. The Q4 monitor was published on 2 June 2010, and is available on our website.⁸

Control period 4 covers the period from 1 April 2009 to 31 March 2014.

⁵ This is available at: http://www.networkrail.co.uk/AnnualReturn2010

⁶ This is available at: http://www.networkrail.co.uk/RegulatoryFinancialStatements2009-10

This is available at: http://www.rail-reg.gov.uk/upload/pdf/383.pdf

⁸ This is available at: http://www.rail-reg.gov.uk/server/show/ConWebDoc.10104

Structure of the document

- 1.5 This document presents information and analysis separately for GB, England & Wales and Scotland where appropriate.
- 1.6 Chapter 2 compares Network Rail's expenditure with the assumptions we made in our PR08 determination, Network Rail's own 2009 budget and Network Rail's expenditure in 2008-09.
- 1.7 Chapter 3 assesses Network Rail's efficiency in 2009-10 and compares its efficiency with our PR08 determination efficiency assumptions.
- 1.8 Chapter 4 reviews the financial performance of Network Rail in 2009-10, compared to our PR08 determination assumptions and in some cases with Network Rail's own 2009 budget and actual 2008-09 figures, by reviewing Network Rail's RAB, net debt, financial costs, and financial ratios.
- 1.9 Chapter 5 reviews Network Rail's actual income in 2009-10 compared to our PR08 determination assumptions, Network Rail's income in 2008-09 and Network Rail's own 2009 budget.
- 1.10 Annex A contains historic information on expenditure, income, efficiency and finance.
- 1.11 Annex B contains a reconciliation of our PR08 determination assumptions for controllable opex, maintenance and renewals to the adjusted PR08 determination assumptions for controllable opex, maintenance and renewals.
- 1.12 All numbers in this document are stated in 2009-10 prices, unless stated otherwise.
- 1.13 There might be some differences in numbers in the tables due to rounding.

Feedback

1.14 We welcome any comments on the content of our assessment. Any comments should be sent to:

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2. Expenditure

Introduction

2.1 This chapter summarises Network Rail's expenditure in comparison to our PR08 determination assumptions, ⁹ its own 2009 budget and actual 2008-09 expenditure. Expenditure includes operating, maintenance, renewals (OMR) and enhancement expenditure. We have included explanatory tables in annex B to provide clarification on how our PR08 determination assumptions were derived. Annex B also explains the post PR08 determination adjustments which have taken place, for example to reclassify some costs between operating and maintenance expenditure.

GB

- 2.2 Network Rail's total expenditure in GB in 2009-10 was £5,999m¹⁰. This was:
 - (a) £1,311m (17.9%) lower than our PR08 determination assumption;
 - (b) £846m (12.4%) lower than its own 2009 budget; and
 - (c) £78m (1.3%) lower than in 2008-09.
- 2.3 The differences in expenditure by category are set out in Table 10 below:

When we refer to the determination, we mean the determination after it is has been adjusted for issues such as the reclassification of controllable opex and maintenance expenditure. The post determination adjustments are explained in Annex B.

This amount excludes any enhancement expenditure outside of the periodic review, for example, projects which are funded through the investment framework.

Table 10: Comparison of GB 2009-10 expenditure (£m, in 2009-10 prices)

	Actual 2009-10	PR08 determination 2009-10	2009 budget	Actual 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(B-A)	(C-A)	(D-A)
Controllable opex	991	843	977	911	-148	-14	-80
Non- controllable opex	434	354	433	402	-80	-1	-32
Maintenance	1,071	1,111	1,098	1,107	40	27	36
Renewals ¹¹	2,304	3,039	2,808	3,153	735	504	849
Enhancements 12	1,050	1,780	1,359	448	730	309	-602
Schedule 4& 8	149	183	170	56	34	21	-93
Total expenditure	5,999	7,310	6,845	6,077	1,311	846	78

Source: Network Rail and our own calculations.

Controllable opex

- 2.4 Controllable operating expenditure (controllable opex) in GB in 2009-10 was £991m. This was £148m (17.6%) higher than our PR08 determination assumption and was largely due to lower improvements in efficiency over the last three years compared to our PR08 determination assumption, i.e. Network Rail exited CP3 in a worse position than we assumed. Some one-off transformation programme costs and actual inflation in 2009-10 being lower than that assumed in Network Rail's 2009-10 pay award (resulting in a real increase in wage costs) also contributed to the higher spend than we assumed. ¹³
- 2.5 Controllable opex was £14m (1.4%) higher than Network Rail's own 2009 budget. This was largely due to higher than expected employee related costs (£44m), which were partially offset by lower insurance costs (£13m) due to payments from third parties for performance penalties relating to business

For Network Rail's internal management purposes, it made an adjustment to its renewals expenditure budget. Therefore, it is different to the renewals expenditure budget in the RAB section of chapter 4 (finance).

Network Rail's own 2009 budget also included enhancements expenditure of £104m, rolled over from CP3 to CP4. Enhancement expenditure in this table does not include investment framework projects.

¹³ The effect of this variance is expected by Network Rail to reverse in 2010-11 based on the latest forecast of RPI.

- interruption. Contractor and agency costs were also £16m lower than Network Rail's budget 2009 due to more work being completed in house, tighter cost controls and better resource planning.
- 2.6 Controllable opex was £80m (8.8%) higher than in 2008-09, largely as a result of Network Rail revising its allocation of costs between operating expenditure and maintenance expenditure and actual inflation in 2009-10 being lower than that assumed in Network Rail's 2009-10 pay award.

Non-controllable opex

2.7 Non-controllable opex in 2009-10 was £434m. This was £80m (22.5%) higher than our determination assumption and was largely because of higher spend on traction electricity (£64m), which is compensated for by higher income, and higher British Transport Police costs (£15m). It is also £1m (0.2%) higher than Network Rail's own 2009 budget, and £32m (7.9%) higher than in 2008-09 largely because of higher spend on traction electricity (£24m), which is compensated for by higher income.

Maintenance

- 2.8 Maintenance expenditure in GB in 2009-10 was £1,071m. This was £40m (3.6%) lower than our PR08 determination assumption and was largely due to Network Rail not yet implementing its planned harmonisation of its maintenance employee's terms and conditions, additional efficiencies and additional one-off transformation programme costs e.g. redundancies.
- 2.9 Maintenance expenditure was £27m (2.5%) lower than Network Rail's own 2009 budget. This was largely due to Network Rail not yet implementing its harmonisation of its maintenance employee's terms and conditions.¹⁴
- 2.10 Maintenance expenditure was also £36m (3.3%) lower than in 2008-09. Network Rail revised its allocation of costs between operating expenditure and maintenance expenditure for 2009-10. This means that maintenance expenditure in 2009-10 was £65m lower than in 2008-09. There have also been the following changes to maintenance expenditure in 2009-10, which have increased expenditure by £55m. These changes were: increased traffic

Further detail of Network Rail's maintenance efficiencies can be found in page 182 of Network Rail's Annual return. This is available at: http://www.networkrail.co.uk/AnnualReturn2010.

(£14m), efficient engineering access (£18m), National Stations Improvement Programme (£3m) and increased maintenance (£20m) as a result of a change to the asset policies (renewals are also reduced). There have also been efficiencies and one-off transformation programme costs e.g. redundancies.

Renewals

- 2.11 Renewals expenditure in GB in 2009-10 was £2,304m. This was £735m (24.2%) lower than our PR08 determination assumption and was largely due to the deferral of work to later in CP4 (£687m) and as explained in chapter 3 (efficiency), our best estimate at present (to be confirmed later in CP4) is that Network Rail has achieved some efficiencies compared to our PR08 determination assumption.
- 2.12 Renewals expenditure was also £504m (18.0%) lower than Network Rail's own 2009 budget.¹⁷ The majority of the underspend was again due to the deferral of work to later in CP4 as well as some efficiencies compared to its own budget 2009.
- 2.13 Renewals expenditure was £849m (26.9%) lower than in 2008-09. The renewals expenditure includes spend on West Coast route modernisation ("WCRM"). This particularly affects the comparison to 2008-09 as Network Rail spent £46m on WCRM in 2009-10 and £479m in 2008-09. Excluding WCRM, Network Rail's renewals expenditure was £416m (15.6%) lower than in 2008-09, largely due to deferrals of expenditure to later in CP4.

In our Q4 monitor, renewals expenditure in GB was £2,390m. At the time, our understanding was that all of the CP3 capital expenditure Network Rail rolled over into CP4 was for renewals but £86m of the expenditure was for enhancements. Therefore, when compared to our Q4 monitor, renewals have reduced by £86m and enhancements have increased by £86m.

Some of this deferral was planned by Network Rail in its CP4 delivery plan. This also applies to England & Wales and Scotland.

Network Rail has provided commentary on its own renewals 2009 budget variance analysis in its Annual Return 2010 (see page 174 for further details). This is available at: http://www.networkrail.co.uk/browseDirectory.aspx?dir=%5CRegulatory%20Documents%5CRegulatory%20Compliance%20and%20Reporting%5CAnnual%20Return&pageid=2893&root=#.

Enhancements

- 2.14 There are two types of enhancements projects being delivered by Network Rail in CP4:¹⁸
 - projects that are funded by our PR08 determination; and
 - investment framework projects. These were not funded by our PR08 determination. They consist of government sponsored projects, Network Rail self-financing projects and third party sponsored projects.
- 2.15 Enhancements expenditure in 2009-10 for schemes funded by the determination was £1,050m. A detailed breakdown of expenditure by project can be found in Network Rail's 2009-10 regulatory accounts and the full list of projects is included in Network Rail's delivery plan. ¹⁹ This was £730m (41.0%) lower than our PR08 determination assumption and was largely due to:
 - underspend of £393m against the specific project costs included in Network Rail's delivery plan. This was largely due to the deferral of spend on the projects, in particular Thameslink (£148m),²⁰ the safety and environment fund (£66m), and Kings Cross (£40m).
 - Network Rail's delivery plan forecasts an underspend in 2009-10 on enhancements compared to our PR08 determination assumption. We accepted the delivery plan's revised outputs but did not change the total enhancement spend in our PR08 determination. For 2009-10 this left a balance, which effectively was for programme deferral to later in CP4. This balance represented allowed expenditure of £337m that Network Rail did not consider it needed in 2009-10.

¹⁸ This applies to both England & Wales and Scotland.

Network Rail's CP4 delivery plan has further details. This is available at: http://www.networkrail.co.uk/documents/6182_Enhancements%20Document%20Dec%2 02009.pdf.

We commissioned the independent reporter (Nichols) to investigate reports of schedule slippage and assess the factors causing it. A summary has been published on our website and it confirms a number of reasons why the works have slipped, particularly work on Farringdon station in order to accommodate Crossrail requirements and work at Blackfriars station was postponed to enable an 8 week track closure. The Nichols report is available at: http://www.rail-reg.gov.uk/server/show/nav.147.

- 2.16 Enhancements spend on projects not funded by the determination was £541m. Therefore, total expenditure on enhancements was £1,591m.
- 2.17 Total enhancements expenditure (excluding investment framework schemes) in 2009-10 was £309m (22.7%) lower than Network Rail's own 2009 budget, for similar reasons as explained in the first bullet point of paragraph 2.15.
- 2.18 Total enhancements expenditure in 2009-10 was £271m higher than in 2008-09 because there are more enhancement projects to be delivered in CP4 than CP3 (£602m), offset by lower investment framework projects delivered in 2009-10 (£330m).

England & Wales

- 2.19 Network Rail's total expenditure in England & Wales in 2009-10 was £5,370m. This was:
 - (a) £1,206m (18.3%) lower than our PR08 determination assumption;
 - (b) £771m (12.6%) lower than Network Rail's own 2009 budget; and
 - (c) £193m (3.5%) lower than in 2008-09.
- 2.20 The differences in expenditure by category are set out in Table 11 below:

Table 11: Comparison of England & Wales's 2009-10 expenditure (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination 2009-10	2009 Budget	Actual 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(B-A)	(C-A)	(D-A)
Controllable opex	896	767	883	827	-129	-13	-69
Non-controllable opex	402	326	401	374	-76	-1	-28
Maintenance	979	1,005	1,005	1,010	26	26	31
Renewals ²¹	2,078	2,702	2,535	2,861	624	457	783
Enhancements ²²	877	1,604	1,156	435	727	279	-442
Schedule 4&8	138	172	161	56	34	23	-82
Total Expenditure	5,370	6,576	6,141	5,563	1,206	771	193

Source: Network Rail and our own calculations.

For Network Rail's internal management purposes, it made an adjustment to its own renewals expenditure budget. Therefore, it is different to the renewals expenditure budget in the RAB section of chapter 4 (finance).

Network Rail's own 2009 budget also included enhancements expenditure of £104m, rolled over from CP3 to CP4. Enhancement expenditure in this table does not include investment framework projects.

Controllable opex

2.21 Controllable opex in England & Wales in 2009-10 was £896m. This was £129m (16.8%) higher than our PR08 determination assumption; £13m (1.5%) higher than Network Rail's 2009 budget and £69m (8.3%) higher than in 2008-09. These variances are largely for the same reasons as discussed above for GB.

Non-controllable opex

2.22 Non-controllable opex in England & Wales in 2009-10 was £402m. This was £76m (23.2%) higher than our PR08 determination assumption and was largely because of higher spend on traction electricity (£61m), which is compensated for by higher income, and higher British Transport Police costs (£14m). It was also £1m (0.3%) higher than Network Rail's budget and £28m (7.5%) higher than in 2008-09 largely because of higher spend on traction electricity (£23m), which is compensated for by higher income.

Maintenance

- 2.23 Maintenance expenditure in England & Wales in 2009-10 was £979m. This was £26m (2.6%) lower than our PR08 determination assumption and was largely due to Network Rail not yet implementing its harmonisation of its maintenance employee's terms and conditions, additional efficiencies and additional one-off transformation programme costs e.g. redundancies.
- 2.24 Maintenance expenditure was £26m (2.6%) lower than Network Rail's own 2009 budget. This was largely due to Network Rail not yet implementing its harmonisation of its maintenance employee's terms and conditions. Maintenance expenditure was also £31m (3.1%) lower than in 2008-09, this was largely for the same reasons as discussed above for GB.

Renewals

- 2.25 Renewals expenditure in England & Wales in 2009-10 was £2,078m. This was £624m (23.1%) lower than our PR08 determination assumption and was largely due to the deferral of work to later in CP4 (£581m) and as explained in chapter 3 (efficiency), our best estimate at present (to be confirmed later in CP4) is that Network Rail has achieved some renewals efficiencies compared to our PR08 determination assumption.
- 2.26 Renewals expenditure was also £457m (18.0%) lower than Network Rail's own 2009 budget. The majority of the underspend is due to the deferral of

- work to later in CP4 as well as some efficiencies compared to its own 2009 budget.
- 2.27 Renewals expenditure was £783m (27.4%) lower than in 2008-09. The renewals expenditure includes spend on WCRM. This particularly affects the comparison to 2008-09 as Network Rail spent £46m on WCRM in 2009-10 and £475m in 2008-09. Excluding WCRM, Network Rail's renewals expenditure was £354m (14.8%) lower than in 2008-09, this was largely due to deferrals of expenditure to later in CP4.

Enhancements

- 2.28 Enhancements expenditure in England & Wales in 2009-10 for schemes funded by our PR08 determination was £877m (a detailed breakdown of expenditure by project can be found in Network Rail's 2009-10 regulatory accounts). This was £727m (45.3%) lower than our PR08 determination assumption and due to:
 - underspend of £353m against the specific project costs included in Network Rail's delivery plan. This was largely due to the deferral of spend on projects such as Thameslink (£148m), the safety and environment fund (£66m) and Kings Cross (£40m); and
 - Network Rail's delivery plan forecasts an underspend in 2009-10 on enhancements compared to our PR08 determination. We accepted the delivery plan's revised outputs but did not change the total enhancement spend in our PR08 determination. For 2009-10 this left a balance, which effectively was for programme deferral to later in CP4. This balance represented allowed expenditure of £374m that Network Rail did not think it needed in 2009-10.
- 2.29 Enhancements spend on projects not funded by our PR08 determination was £520m. Therefore, total expenditure on enhancements was £1,397m.
- 2.30 Total enhancements expenditure in 2009-10 (excluding investment framework schemes) was £279m (24.1%) lower than Network Rail's own 2009 budget for similar reasons as explained in the first bullet point of paragraph 2.28.
- 2.31 Total enhancements expenditure in 2009-10 was £184m higher than in 2008-09 because there are more enhancement projects to be delivered in CP4 than CP3 (£442m), offset by lower investment framework projects delivered in 2009-10 (£258m).

Scotland

- 2.32 Network Rail's total expenditure in Scotland in 2009-10 was £629m. This was:
 - (a) £105m (14.3%) lower than our PR08 determination assumption;
 - (b) £75m (10.7%) lower than Network Rail's own 2009 budget; and
 - (c) £116m (22.6%) higher than in 2008-09.
- 2.33 The differences in expenditure by category are set out in Table 12 below:

Table 12: Comparison of Scotland's 2009-10 expenditure (£m, 2009-10 prices)

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (B-A)	2009 budget variance (C-A)	Prior year variance (D-A)
Controllable opex	95	76	94	83	-19	-1	-12
Non-controllable opex	32	28	32	28	-4	-	-4
Maintenance	92	106	94	97	14	2	5
Renewals ²³	226	337	273	292	111	47	66
Enhancements ²⁴	173	176	203	13	3	30	-160
Schedule 4&8	11	11	8	0	0	-3	-11
Total Expenditure	629	734	704	513	105	75	-116

Source: Network Rail and our own calculations.

Controllable opex

- 2.34 Controllable opex in Scotland in 2009-10 was £95m. This was £19m (24.2%) higher than our PR08 determination assumption and it was also £1m (1.1%) higher than Network Rail's own 2009 budget. The reasons for these variances are largely the same as described above for GB.
- 2.35 Controllable opex was £12m (14.1%) higher than in 2008-09, largely as a result of Network Rail revising its allocation of costs between operating expenditure and maintenance expenditure and actual inflation in 2009-10 being lower than that assumed in Network Rail's 2009-10 pay award.

For Network Rail's internal management purposes, it made an adjustment to its renewals expenditure budget. Therefore, it is different to the renewals expenditure budget in the RAB section of chapter 5 (finance).

²⁴ Enhancement expenditure in this table does not include investment framework projects.

Non-controllable opex

2.36 Non-controllable opex was £4m (14.7%) higher than our PR08 determination assumption. This was largely because of higher spend on traction electricity (£3m), which is compensated for by higher income, and higher British Transport Police costs (£1m). It was equal to Network Rail's budget and £4m (14.1%) higher than in 2008-09 because of higher spend on traction electricity (£1m), which is compensated for by higher income, higher spend on cumulo rates (£1m) and higher spend on British Transport Police costs (£1m).

Maintenance

- 2.37 Maintenance expenditure in Scotland in 2009-10 was £92m. This was £14m (13%) lower than our PR08 determination assumption and was largely due to additional efficiencies and Network Rail not yet implementing its harmonisation of its maintenance employee's terms and conditions, additional efficiencies, offset by additional one-off transformation programme costs e.g. redundancies.
- 2.38 Maintenance spend was £2m (1.8%) lower than Network Rail's own 2009 budget. This was largely due to Network Rail not yet implementing its harmonisation of its maintenance employee's terms and conditions.
- 2.39 Maintenance expenditure was also £5m (5.4%) lower than in 2008-09. Network Rail revised its allocation of costs between operating expenditure and maintenance expenditure for 2009-10. This means that maintenance expenditure in 2009-10 was £5m lower than in 2008-09. There have also been changes to maintenance expenditure in 2009-10, which have increased expenditure, such as a change to its asset policies (renewals are also reduced). There have also been efficiencies and one-off transformation programme costs e.g. redundancies.

Renewals

- 2.40 Renewals expenditure in Scotland in 2009-10 was £226m. This was £111m (33%) lower than our PR08 determination assumption and was largely due to the deferral of work to later in CP4 (£106m) as well as some efficiencies compared to our PR08 determination assumption.
- 2.41 Renewals expenditure was also £47m (17.2%) lower than Network Rail's own 2009 budget. The majority of the underspend was due to the deferral of work

- to later in CP4 and as explained in chapter 3 (efficiency) Network Rail has achieved some efficiencies compared to its own 2009 budget.
- 2.42 Renewals spend was £66m (22.6%) lower than in 2008-09. This was largely due to deferral of expenditure to later in CP4 and efficiencies.

Enhancements

- 2.43 Enhancements expenditure in Scotland in 2009-10 for schemes funded by our PR08 determination was £173m (a detailed breakdown of expenditure by project can be found in Network Rail's 2009-10 regulatory accounts). This was £3m (1.7%) lower than our PR08 determination and was largely due to:
 - underspend of £40m against the specific project costs included in Network Rail's delivery plan. This was largely due to the deferral of spend on the projects, such as Airdrie to Bathgate (£17m) as a result of a deferral of work to 2010-11, and a £19m underspend on the Paisley Corridor improvements project, which has been re-scoped in accordance with the change control process;²⁵ and
 - Network Rail's delivery plan forecasts higher spend in 2009-10 on enhancements compared to our PR08 determination. We accepted the delivery plan's revised outputs but did not change the total enhancement spend in our PR08 determination. For 2009-10 this left a balance, which effectively was offsetting the programme advancement to 2009-10 from later in CP4. This balance represented allowed expenditure of £37m that Network Rail did not think it needed in 2009-10.
- 2.44 Enhancements spend on projects not funded by our PR08 determination was £21m. Therefore, total expenditure on enhancements was £194m.
- 2.45 Total actual enhancements expenditure in 2009-10 (excluding investment framework schemes) was £30m (14.8%) lower than Network Rail's own 2009 budget for similar reasons as explained in the first bullet point of paragraph 2.43.

The change control process allows determination projects to be revised in certain circumstances. See our PR08 final determination for further details. This is available at: http://www.rail-reg.gov.uk/upload/pdf/383.pdf.

2.46 Total enhancements expenditure in 2009-10 was £88m higher than in 2008-09 because there are more enhancement projects to be delivered in CP4 than CP3 (£160m) and this was partly offset by lower investment framework projects delivered in 2009-10 (£72m).

3. Efficiency

Introduction

- 3.1 Having an accurate calculation of Network Rail's efficiency is an important part of our annual assessment of the company's performance.
- 3.2 In this chapter, we present our views on Network Rail's efficiency in GB, England & Wales and Scotland in 2009-10. This efficiency analysis covers controllable opex, maintenance and renewals expenditure. Separately, and for the first time, we are also presenting an analysis of Network Rail's enhancements efficiency.

Measuring efficiency

- 3.3 There are a number of ways of measuring efficiency. For example, financial performance in a year can be compared to performance in the previous year or compared with a target that has been set.
- 3.4 Network Rail changed the way it calculates its efficiency for 2009-10 by introducing its cost efficiency measure (CEM). The CEM was designed to replace the financial efficiency index (FEI) used in CP3. The CEM calculates the efficiency of operating, maintenance and renewals expenditure as a percentage of a defined baseline.
- 3.5 Network Rail and ORR do not consider that the CEM actually measures real economic efficiency (which we define as the costs of delivering the same or a normalised level of outputs after taking account of other exogenous factors outside Network Rail's control, from one year to the next), but simply measures how Network Rail's expenditure in 2009-10 compared to its own adjusted 2008-09 baseline expenditure figure. ²⁶ Both Network Rail and ORR also agree that a comparison to a periodic review determination is also not necessarily a real economic efficiency measure from one year to the next as it measures Network Rail's efficiency compared to an assumed financial position at the beginning of a control period which could turn out to be incorrect.

Network Rail presented in its 2010 annual return a revised version of the CEM, which was closer to how we think the measure should be calculated.

- 3.6 We have worked with Network Rail to overcome these issues and have agreed a new approach to measuring 'year-on-year economic efficiency', as follows:
 - (a) first, we will calculate Network Rail's change in efficiency from the previous year, using an agreed baseline expenditure figure. We have agreed with Network Rail the baseline for this year's calculation, which for controllable opex and maintenance is essentially its 2008-09 actual expenditure plus adjustments for inflation and other exogenous factors, e.g. changes in traffic and required outputs. For renewals it is a combination of PR08 determination pre-efficient expenditure for some assets and PR08 determination implied volumes multiplied by 2008-09 unit costs for other assets, such as track;²⁷ and
 - (b) second, we will reconcile this efficiency calculation with our PR08 determination efficiency assumption.
- 3.7 Network Rail will continue to use the CEM for its internal management purposes. For example, Network Rail in its CEM makes adjustments for redundancy and severance costs. Also, there are some items that cannot be known until after the start of the financial year, such as inflation, and Network Rail's management wants fixed budgets to manage against from the start of each financial year.
- 3.8 The main differences between the comparison to our PR08 determination measure and the 'year-on-year economic efficiency' measure are identified below:
 - (a) for operating and maintenance expenditure, the comparison to our PR08 determination measure compares actual expenditure in 2009-10 to our pre-efficient expenditure assumption. Whereas in the 'year-onyear economic efficiency' measure we compare actual expenditure in 2009-10 to actual expenditure in 2008-09 (as adjusted for inflation and other exogenous factors e.g. changes in traffic and required outputs); and

Network Rail's unit cost framework is a direct input to Network Rail's calculation of efficiency and was reviewed by Arup, the independent reporter. We will publish the report shortly with our views on the issues that Arup, the independent reporter has raised.

- (b) for renewals, at present there is no difference between the two measures as both of them are based on our PR08 determination's preefficient baseline. The 'year-on-year economic efficiency' measure cannot use the previous year's expenditure as a baseline given that there are generally significant variations in the level and type of renewals activity between years. We therefore compared the actual expenditure in 2009-10 with a baseline for 2009-10 developed by Network Rail. We asses the variance between actual and baseline, taking account of deferral.
- 3.9 At the time we published our Q4 monitor we were still reviewing Network Rail's revised asset policies, which it sent us in late January 2010. Therefore, we did not include renewals efficiency in our overall efficiency calculations.
- 3.10 On 1 June 2010 we wrote to Network Rail²⁸ to confirm that we accepted that its revised asset policies satisfied our robustness assessment and that with the exception of that for civil structures, they also appear to be sustainable.²⁹
- 3.11 This puts us in a better position to reach a view on Network Rail's efficiency analysis for 2009-10 and we have been discussing renewals efficiency with Network Rail in order to reach a more definitive view.
- 3.12 However, it can be difficult to distinguish between a deferral of work and efficiency as a result of a change in scope. This is particularly the case for 2009-10 when the asset policies were being revised by Network Rail and only accepted by us as robust and sustainable after the year end. Although Network Rail has presented us with further analysis on the extent to which renewals volume reductions can be categorised as efficiency, there remains a degree of uncertainty about this.
- 3.13 Therefore, our assessment of renewals efficiency for 2009-10 can only be indicative, and we cannot provide a firmer view until later in CP4. For now, and for the purpose of this annual efficiency and finance assessment, we have accepted that Network Rail's analysis and calculations of renewals

The letter is available at: http://www.rail-reg.gov.uk/upload/pdf/asset-policies-conclusions-010610.pdf.

Our judgment on Network Rail's asset policies is based on a view of the asset policies over the full five year CP4 period.

efficiency appear reasonable and we have included this in our overall efficiency assessment.³⁰

Efficiency over CP4

- 3.14 Our PR08 determination is for five years. Network Rail has established a five-year delivery plan to achieve the efficiencies assumed in our PR08 determination and deliver the required outputs. Network Rail's delivery plan has a different phasing of expenditure compared to our PR08 determination. In 2009-10, Network Rail expected to achieve a lower level of efficiency than we assumed in our PR08 determination, as it exited CP3 in a worse position than we assumed in our PR08 determination and budgeted for higher operating expenditure in 2009-10.
- 3.15 Network Rail has the flexibility to phase expenditure in this way in order to meet its output obligations. We recognise that Network Rail's expenditure was lower than its overall 2009-10 budget and that it outperformed its CEM target. However, Network Rail's challenge in the remainder of CP4 is now greater than we assumed in our PR08 determination.
- 3.16 Network Rail will update us regularly on its efficiency plans and the actions it is taking to deliver the efficiencies and the contribution that these actions make to Network Rail's delivery plan, both in a given year and for CP4 as a whole.

Network Rail's efficiency in 2009-10

3.17 Tables 13, 14 and 15 analyse Network Rail's efficiency for GB, England & Wales and Scotland.

Even though we have not accepted that Network Rail's civils asset policy is sustainable, we have included Network Rail's estimated civils efficiency in our efficiency calculations but we will adjust the calculations if the civils asset policy is subsequently not shown to be sustainable.

Table 13: Analysis of efficiency in GB in 2009-10

	Year-on-year economic efficiency	PR08 determination	PR08 determination assumption
Controllable opex	-3.6%	-14.4%	2.8%
Maintenance	2.3%	6.7%	3.2%
Renewals	7.1%	7.1%	5.0%
Total (OMR)	3.6%	2.8%	3.8%

Source: Network Rail submissions and our own calculations.

- 3.18 Network Rail's controllable opex efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was -3.6%. This worse performance compared with 2008-09 is largely a result of employment costs running ahead of inflation.
- 3.19 Network Rail's controllable opex efficiency in 2009-10 on a PR08 determination basis was -14.4%. This is 17.2% below our PR08 determination assumption of an improvement of 2.8%. The main reason that this differs significantly from the 'year-on-year economic efficiency' measure is that Network Rail exited CP3 in a worse position than we assumed in our PR08 determination. Chapter 2 (expenditure) contains more details of Network Rail's controllable opex performance.
- 3.20 Network Rail's maintenance efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was 2.3%.
- 3.21 Network Rail's maintenance efficiency in 2009-10 on a PR08 determination basis was 6.7%. This is 3.5% above our PR08 determination assumption of 3.2%. The main reasons that this differs from the 'year-on-year economic efficiency' measure are largely because Network Rail has not yet incurred full expenditure on its harmonisation of maintenance employee's terms and conditions (there is an allowance for this in our PR08 determination). Chapter 2 (expenditure) contains more details of Network Rail's maintenance expenditure performance.
- 3.22 Network Rail's renewals efficiency in 2009-10 on a PR08 determination basis and a 'year-on-year economic efficiency' basis was 7.1%. This is 2.1% above our PR08 determination assumption of 5.0%. Chapter 2 (expenditure) contains more details of Network Rail's renewals performance.

- 3.23 Network Rail's total efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was 3.6%.
- 3.24 Network Rail's total efficiency in 2009-10 on a PR08 determination basis was 2.8%. This is 1.0% below our PR08 determination assumption of 3.8%.

Table 14: Analysis of efficiency in England & Wales in 2009-10

	Year-on-year efficiency	PR08 determination	PR08 determination assumption
Controllable opex	-3.5%	-13.7%	2.8%
Maintenance	2.5%	5.7%	3.2%
Renewals	7.0%	7.0%	5.0%
Total (OMR)	3.7%	2.6%	3.8%

Source: Network Rail submissions and our own calculations.

- 3.25 Network Rail's controllable opex efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was -3.5%. The main reason for this worse position than in 2008-09 is the same as for GB as a whole.
- 3.26 Network Rail's controllable opex efficiency in England & Wales in 2009-10 on a PR08 determination basis was -13.7%. This is 16.5% below our PR08 determination assumption of 2.8%. The main reasons for the significant difference compared with the 'year on year economic efficiency' measure are the same as for GB as a whole.
- 3.27 Network Rail's maintenance efficiency in England & Wales in 2009-10 on a 'year-on-year economic efficiency' basis was 2.5%.
- 3.28 Network Rail's maintenance efficiency in England & Wales in 2009-10 on a PR08 determination basis was 5.7%. This is 2.5% above our PR08 determination assumption of 3.2%. The main reasons for the difference compared with the 'year on year economic efficiency' measure are the same as those for GB as a whole.
- 3.29 Network Rail's renewals efficiency in 2009-10 on a PR08 determination basis and a 'year-on-year economic efficiency' basis was 7.0%. This is 2.0% above our PR08 determination assumption of 5.0%.

- 3.30 Network Rail's total efficiency in England & Wales in 2009-10 on a 'year-on-year economic efficiency' basis was 3.7%.
- 3.31 Network Rail's total efficiency in England & Wales in 2009-10 on a PR08 determination basis was 2.6%. This is 1.2% below our PR08 determination assumption of 3.8%.

Table 15: Analysis of efficiency in Scotland in 2009-10

	Year-on-year economic efficiency	PR08 determination	PR08 determination assumption
Controllable opex	-3.6%	-21.5%	2.8%
Maintenance	0.7%	16.0%	3.2%
Renewals	7.4%	7.4%	5.0%
Total (OMR)	3.5%	4.3%	3.8%

Source: Network Rail submissions and our own calculations.

- 3.32 Network Rail's controllable opex efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was -3.6%. The main reason for this worse position than in 2008-09 is the same as for GB as a whole.
- 3.33 Network Rail's controllable opex efficiency in 2009-10 on a PR08 determination basis was -21.5%. This is 24.3% below our PR08 determination assumption of 2.8%. The main reasons for the significant difference compared with the 'year on year economic efficiency' measure are the same as those for GB as a whole.
- 3.34 Network Rail's maintenance efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was 0.7%.
- 3.35 Network Rail's maintenance efficiency in 2009-10 on a PR08 determination basis was 16.0%. This is 12.8% above our PR08 determination assumption of 3.2%. The main reason for this improvement is the same as in GB as a whole except Network Rail has made additional efficiencies in Scotland.
- 3.36 Network Rail's renewals efficiency in 2009-10 on a PR08 determination basis and a 'year-on-year economic efficiency' basis was 7.4%. This is 2.4% above our PR08 determination assumption of 5.0%.

- 3.37 Network Rail's total efficiency in 2009-10 on a 'year-on-year economic efficiency' basis was 3.5%.
- 3.38 Network Rail's total efficiency in 2009-10 on a PR08 determination basis was 4.3%. This is 0.5% above our PR08 determination assumption of 3.8%.

Unit costs

3.39 Network Rail has continued to develop, and report on, a suite of both maintenance and renewals unit costs and has changed its approach to calculating both maintenance and renewals unit costs in 2009-10. Arup, the independent reporters, have produced two reports for us and Network Rail on unit costs. The first report considered the overall unit cost framework and whether it was fit for purpose and it also reviewed Network Rail's CEM and FVA. The second report reviewed the unit costs Network Rail included in its 2010 annual return and checked how accurate they were. We intend to publish these reports shortly together with our views on the issues that Arup, the independent reporter, has raised.

Enhancements Efficiency

Background

- 3.40 The efficiency analysis of enhancements is being undertaken for the first time in our annual efficiency and finance assessment. Assessing the efficiency of enhancements is different in some ways to the efficiency assessment of maintenance and renewal activities. This is mainly due to the nature of enhancements projects, which often have bespoke solutions and include significant development and delivery costs spread over several years.
- 3.41 For the projects funded by our PR08 determination, we did not publish a headline efficiency number that we applied to the projects. Instead we allowed for efficiency when we calculated the project costs. For non-PR08 funded projects an efficient cost is determined when we approve a project to be added to the RAB.
- 3.42 We have assessed the efficiency of Network Rail's expenditure on enhancements in 2009-10 by:³¹

³¹ As this is the first year of reporting efficiency for these projects for CP4, there are no trends to report. This means that at present any comparisons need to be based on industry norms or other independent benchmarks.

- (a) Reviewing, on an aggregate basis, progress towards delivery plan milestones compared to actual spend on PR08 schemes;
- (b) reviewing specific projects approved through the investment framework; and
- (c) commissioning a number of specific reporter investigations undertaken in 2009-10.

Overview

- 3.43 Network Rail does not include enhancement expenditure in the CEM but it does include enhancement efficiency in its calculation of FVA, where it has not recognised any of the enhancements underspend as being efficient.
- 3.44 During the year there were examples of both efficiency and inefficiency on enhancements but overall Network Rail in its FVA analysis is not recognising any efficiency on enhancements. The enhancement underspend is a result of either cancelling or deferring work on projects and not efficiency. We agree with Network Rail and therefore conclude that underspend on the enhancements programme during 2009-10 is due to non-delivery of work rather than efficient programme delivery in excess of the efficiencies assumed in Network Rail's budget and our PR08 determination.

GB

3.45 Overall, reasonable progress was made last year, although Network Rail is slightly behind its own programme. We note that the key regulatory delivery milestones in 2009-10 were met but there has been some slippage on the whole to date.³² Many projects are still in the development phase and we recognise that measuring efficient progress is not straightforward as time and effort spent on project design may lead to more efficient delivery.

England & Wales

3.46 As noted in the Expenditure section, one of the main contributory factors to the underspend in England & Wales was the Thameslink programme.

³² To undertake an analysis for the projects delivered we have compared performance on delivering milestones against how much was spent. Information provided to us at period 13, as part of our regular monitoring of delivery plan schemes, showed that 22% of milestones were behind schedule with a 25% underspend.

3.47 We reviewed the costs of 24 Investment Framework projects in 2009-10. These were all Train Operating Company (TOC) sponsored works being carried out at stations. The works included new ticket machines, car park extensions and depot improvements. The projects varied in value from £70m to £61k. We determined the efficient spend for each project. In this sample we found no significant differences between our assessment and the value estimated by Network Rail.

Scotland

3.48 There are three enhancement projects (Glasgow - Kilmarnock, Glasgow Airport Rail Link (now renamed as Paisley Corridor Improvement) and Network Rail's work on the Borders scheme) for which we said we would carry out an ex post efficiency assessment of any aggregate overspend. Network Rail has not overspent on these projects in 2009-10 and hence we have not needed to carry out an assessment.

Reporter Investigations on enhancement schemes

3.49 Throughout 2009-10 we have undertaken a number of investigations using the independent reporters. These reveal a number of points that contribute to our assessment of Network Rail's enhancement efficiency.

Whole life costings

3.50 In October 2009, we commissioned quality reviews of two projects - the North London Railway Infrastructure Project³³ and the Glasgow-Kilmarnock line.³⁴ We checked to see whether these projects have been designed, specified and installed to the appropriate quality, so delivering minimum life cycle costs. The reporter found that although Network Rail had considered the balance between upfront and operating costs (and hence whole-life costs), this had not been done in a clear, quantified and documented way. We have raised this issue with Network Rail and expect the company to respond to the recommendations.

The report is available at: http://www.rail-reg.gov.uk/upload/pdf/enh-nll-021209.pdf.

The report is available at: http://www.rail-reg.gov.uk/upload/pdf/enh-glasgow-Kilmarnock-261109.pdf.

Comparison of costs at stations

- 3.51 In February 2010 we commissioned Nichols, the independent reporters, to investigate whether there is any evidence that works at stations can be done more cheaply and quickly by train operators than by Network Rail.³⁵ This work has provided some interesting information and we are building upon this initial work and will collect additional data to provide a more definitive comparison between the costs of Network Rail and train operators delivering enhancements.
- 3.52 We used two measures to quantify cost efficiency. The first was a ratio of direct costs to total project costs. This showed that, based on 218 relevant examples, Network Rail achieves an average efficiency of around 53%, which means that on average 53% of overall cost went into the physical asset. There was insufficient data to provide a similar average for TOC projects although the project efficiency for each TOC project appeared to be above the Network Rail average. This observation does not, however, take account of whole life issues or the quality of the resulting asset, which may be relevant to this apparent difference.
- 3.53 The second measure was unit cost, which is a cost per unit of output taking account of all costs attributed to the delivery of that output. Fourteen Network Rail customer information systems (CIS) projects were analysed in this way together with two TOC CIS projects. This small sample showed that Network Rail's 14 CIS installations cost between £13.4k and £27.8k for each screen. The two TOC installations cost between £6.6k and £15.4k per screen.

Efficiency reviews of Network Rail Discretionary Fund and Strategic Freight Network

3.54 In March 2010, we commissioned an efficiency review of a sample of schemes from the Network Rail Development Fund and Strategic Freight Network fund. 36 Summaries of these reports have been published on our website. There is evidence that value management has been undertaken

The report is available at: http://www.rail-reg.gov.uk/upload/pdf/nichols-enhancement-costs-240610.pdf.

These reports are available at: http://www.rail-reg.gov.uk/upload/pdf/enh-nr-discretionary-fund-jul10.pdf and http://www.rail-reg.gov.uk/upload/pdf/enh-strategic-freight-network-jul10.pdf.

during project development to improve benefits and challenge costs. The consistent finding on the NRDF schemes is that effort undertaken in the early stages of a scheme to challenge and test assumptions (particularly relating to engineering standards) has resulted in more efficient scheme delivery. The reporters also analysed cost efficiency, concluding that two of the three schemes had a percentage of overall cost going into the asset at 60% with the other at 49%.

3.55 In the Strategic Freight Network report, the reporter defined benchmarks based on industry good practice covering aspects of governance, cost control, project control and delivery. The review concluded that these benchmarks were met but noted that a whole life costing appraisal would have enhanced the process. The reporter also made a number of recommendations that we will follow up with Network Rail.

Conclusion

3.56 Overall, Network Rail is delivering in line with the efficiency assumptions in our PR08 determination, but given the slippage on the programme it is too early to reach definitive conclusions. We will continue to review efficiency issues at a project level and to monitor aggregate efficiency.

Efficiency benefit sharing mechanism

- 3.57 In PR08 we established an 'efficiency benefit sharing mechanism' whereby both train operators and freight operators would share in Network Rail's outperformance of its regulatory efficiency assumptions, where they demonstrably assist in that outperformance.
- 3.58 On the basis of our indicative efficiency analysis, Network Rail has slightly outperformed the requirements of the efficiency benefit sharing mechanism in respect of Scotland only. However, given the uncertainty about renewals efficiency discussed above, it is not appropriate for Network Rail to make a pay out under this mechanism at this stage. We intend to report further on this in the future.

4. Finance

Introduction

- 4.1 This chapter reviews Network Rail's financial performance in 2009-10. Comparisons are made against our PR08 determination assumptions and in some cases with Network Rail's own 2009 budget³⁷ and actual 2008-09 figures.
- 4.2 This chapter covers the following issues: regulatory asset base (RAB), net debt, financing costs and financial ratios (including net debt to RAB and the adjusted interest cover ratio (AICR)).

Regulatory asset base (RAB)

Background

- 4.3 The way we roll forward the RAB was revised for CP4. We now add actual efficient capex to the RAB in CP4 subject to the rules set out in our RAB forward policy. These rules adjust for issues such as the deferral of expenditure. Our RAB roll forward policy is set out in our PR08 determination³⁸ and also in the Regulatory Accounting Guidelines.³⁹
- 4.4 In estimating the value of the RAB each year, a provisional assessment of the non-delivery of outputs and on the efficiency of renewals and enhancements expenditure is made. The RAB therefore remains provisional until the end of CP4, when these elements will be finally assessed.
- 4.5 The amounts for the ring-fenced fund and amortisation are effectively fixed for the five years of the control period as set out in our PR08 determination due to the way in which they calculated.

Network Rail's own 2009 budget is similar to the first year (2009-10) of its CP4 delivery plan.

³⁸ For further details see: chapter 15 Periodic review 2008 - Determination of Network Rail's outputs and funding for 2009-14.

³⁹ Regulatory Accounting Guidelines February 2010 are available at: http://www.rail-reg.gov.uk/server/show/ConWebDoc.5696.

⁴⁰ In certain circumstances the ring-fenced fund adjustment can be altered and both of the adjustments are uplifted for inflation each year.

- 4.6 We have asked Halcrow, the independent reporter, to review Network Rail's expenditure on income generating schemes that may be added to the RAB. Expenditure on these schemes was £30m in 2009-10 and Network Rail has assumed that it will all be added to the RAB. Should the amount to be added to the RAB changes following completion of Halcrow's report, Network Rail will reflect this change in its 2010-11 regulatory accounts.
- 4.7 Enhancements that have been added to the RAB include non-PR08 investment framework enhancements.⁴¹

Movements in the RAB – GB

- 4.8 This section outlines the movement in the RAB in 2009-10 and its value as at 31 March 2010. 42 The opening RAB at the start of CP4 was £34,204m. 43 At 31 March 2010, Network Rail's RAB had risen to £35,729m. This increase is largely because renewals (£2,289m) and enhancement expenditure (£1,254m) have been added to the RAB and amortisation 44 (£1,570m) and the ring-fenced fund 45 (£448m) have been deducted from the RAB.
- 4.9 Table 17 below analyses the movements in the RAB for GB compared with our PR08 determination and Network Rail's own 2009 budget.

A more detailed analysis of enhancement expenditure is given in statement 3 of Network Rail's regulatory accounts for the year ended 31 March 2010.

A reconciliation of the RAB to the value of Network Rail's assets in Network Rail's statutory accounts is shown in appendix A of Network Rail's Regulatory Financial Statements for the year ended 31 March 2010.

In our 2009 Annual Assessment we estimated Network Rail's CP4 opening RAB to be £34.2bn +/- £0.1bn as we were not sure of the final value of some adjustments that could be made to the RAB. The CP4 opening was finalised as £34,109m (in 2008-09 prices) (net of an adjustment for the actual capex outturn in CP3 of £56m) and an inflation adjustment of £95m was made to index the value at 1 April 2009 to 2009-10 prices, so the CP4 opening RAB is £34,204m.

Amortisation in CP4 is based on average annual long-run steady-state capital expenditure (i.e. renewals) as set out in the document: *Approach to the amortisation of Network Rail's regulatory asset base*, Office of Rail Regulation, September 2006. This can be accessed at: www.rail-reg.gov.uk/upload/pdf/pr08-amortisation-let-290906.pdf.

The ring-fenced fund is part of Network Rail's allowed return. It is a 'virtual fund' which is used to fund a proportion of the capex that is required to deliver the HLOS on a pay-asyou-go basis. The RFF related expenditure is therefore not added to the RAB. It is calculated as the residual from the allowed return once expected debt service costs, the FIM fee and the risk buffer have been deducted. More background information on the ring-fenced fund can be found in Chapter 14 of our Periodic Review 2008 determination.

Table 17: Comparison of actual movements in the GB RAB (£m, nominal prices)

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	PR08 determination variance (A-B)
Opening RAB at 1 April 2009 (2008-09 prices)	34,109	34,109	34,454	-
Indexation for the year	95	95	-517	-
Renewals additions	2,289	3,040	2,669	-751
Enhancements additions:				
PR08 determination projects	1,039	1,780	1,359	-741
Non-PR08 determination projects ⁴⁶	215	-	236	215
Ring-fenced fund	-448	-448	-448	-
Amortisation	-1,570	-1,570	-1,520	-
Closing RAB at 31 March 2010 (2009-10 prices)	35,729	37,006	36,233	-1,277

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

- 4.10 The closing value of the RAB at 31 March 2010 was £35,729m,⁴⁷ which was £1,277m lower than our PR08 determination.⁴⁸ This is due to the underspend on renewal expenditure (£751m) and PR08 enhancement expenditure (£741m), offset by non-PR08 determination enhancement expenditure (£215m).
- 4.11 The closing value of the RAB is also £504m lower than Network Rail's own 2009 budget. This is largely due to the underspend on renewal expenditure (£380m) and PR08 enhancement expenditure (£320m), and a lower actual opening balance than budgeted by Network Rail (£345m) offset by a difference on indexation of (£612m).

⁴⁶ This excludes capital projects paid for by certain third parties, where the initial capital cost is not added to the RAB.

As a comparison, the unimpaired depreciated replacement cost of Network Rail's network (after excluding the replacement costs of embankments, cuttings and tunnels) is estimated at £75bn (2009: £75bn) as stated in note 12 to Network Rail Infrastructure Limited's Annual Report and Accounts 2010.

Indexation is applied to the value of the RAB carried forward from the previous year to ensure that the value of the RAB is maintained in real terms. Indexation is calculated with reference to the Retail Price Index (RPI) published by the Office of National statistics and based on the index RPI CHAW. For 2009-10, the indexation adjustment was a 0.278% increase in RPI. Network Rail's budget had assumed a -1.5% change in RPI (i.e. a deflation of 1.5%) hence the negative figure for indexation in Network Rail's own 2009 budget.

4.12 A more detailed analysis of the renewals and enhancement RAB additions for 2009-10 is set out in the RAB roll forward section below and more detail of the reasons for the underlying renewals and enhancement expenditure variances is given in chapter 2 (expenditure).

Movements in the RAB - England & Wales

4.13 Table 18 below shows the analysis of the movements in the RAB compared to our PR08 determination and Network Rail's own 2009 budget.

Table 18: Comparison of actual movements in the RAB for England & Wales (£m, nominal prices)

	Actual 2009-10	PR08 determination	2009 budget	PR08 determination variance
	(A)	(B)	(C)	(A-B)
Opening RAB at 1 April 2009 (2008-09 prices)	30,605	30,605	30,961	-
Indexation for the year	85	85	-517	-
Renewals additions	2,065	2,703	2,395	-638
Enhancements additions:				
PR08 determination projects	876	1,604	1,156	-728
Non-PR08 determination projects ⁴⁹	211	-	236	211
Ring-fenced fund	-402	-402	-403	-
Amortisation	-1,383	-1,383	-1,336	-
Closing RAB at 31 March 2010 (2009-10 prices)	32,057	33,212	32,491	-1,155

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 4.14 The closing value of the RAB at 31 March 2010 of £32,057m was £1,155m lower than our PR08 determination. This was due to the underspend on renewals (£638m) and enhancement (£728m) expenditure, offset by non-PR08 determination enhancement expenditure (£211m).
- 4.15 The closing value of the RAB was also £434m lower than Network Rail's own 2009 budget. This was largely due to the deferral of renewal expenditure (£330m) and PR08 enhancement expenditure (£280m), and a lower actual opening balance than budgeted by Network Rail (£356m) offset by a difference on indexation of (£602m).

⁴⁹ This excludes capital projects paid for by certain third parties, where the initial capital cost is not added to the RAB.

Movements in the RAB - Scotland

4.16 Table19 below shows the analysis of the movements in the RAB for Scotland compared to our PR08 determination and Network Rail's own 2009 budget.

Table 19: Comparison of actual movements in the RAB for Scotland (£m, nominal prices)

	Actual	PR08 determination	2009 budget	PR08 determination variance
	(A)	(B)	(C)	(A-B)
Opening RAB at 1 April 2009 (08/09 prices)	3,504	3,504	3,493	-
Indexation for the year	10	10	-	-
Renewals additions	224	337	274	-113
Enhancements additions:				
PR08 determination projects	163	176	203	-13
Non-PR08 determination projects ⁵⁰	4	-	-	4
Ring-fenced fund	-46	-46	-45	-
Amortisation	-187	-187	-184	-
Closing RAB at 31 March 2010	3,672	3,794	3,741	-122

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 4.17 The closing value of the RAB at £3,672m was £122m lower than our PR08 determination. This was largely due to the underspend on renewals expenditure (£113m).
- 4.18 The closing value of the RAB is also £69m lower than Network Rail's own 2009 budget. This was largely due to the underspend on renewal expenditure (£50m) and PR08 enhancement expenditure (£40m), offset by a difference on indexation of (£10m).

⁵⁰ This excludes capital projects paid for by certain third parties, where the initial capital cost is not added to the RAB.

Adjustments to renewals and enhancements RAB additions

- 4.19 This section reconciles the assumptions we made in our PR08 determination for renewals and enhancement expenditure to renewals and enhancement RAB additions.⁵¹
- 4.20 The adjustments that have been made include:
 - (a) the deferrals from CP3 relate to the carry forward of renewal expenditure from CP3 to CP4;
 - (b) the delivery plan additions/reductions represent changes to Network Rail's delivery plan that have been agreed through change control;
 - (c) the delivery plan re-classifications are the adjustments that we have agreed to where delivery plan projects include both elements of renewal expenditure and elements of enhancement expenditure (known as 'mixed' projects). We will include the expenditure related to a project in one place as this reflects the way in which the project is managed. The projects will either be categorised as renewals or enhancements projects depending on where the greater amount of expenditure was originally classified;
 - (d) as set out in our PR08 determination, we have included an adjustment to reflect the uncertainties of renewals input prices during CP4. This adjustment is based on the movement in the infrastructure output price index (IOPI). In the current year, this index showed a provisional ⁵² reduction in input prices and so the adjustment in the above table is a deduction from the RAB;
 - (e) deferrals to later in CP4 represents work that has been deferred to later in CP4; and
 - (f) in Network Rail's estimate of its RAB at 31 March 2010 it has assumed that some of the underspend is due to efficiency and has adjusted the RAB accordingly in accordance with our PR08 determination and the RAG's. Network Rail's assessment of efficient under/overspend for the current year is based upon its view of the efficiency for the whole of the CP4. A respective proportion of this assessment has then been applied

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A more detailed reconciliation of expenditure on the RAB is given in statement 2b to Network Rail's Regulatory Financial statements for the year ended 31 March 2010.

⁵² Network Rail's 2010-11 regulatory accounts will contain the final number.

to the current year. We will therefore keep this adjustment under review as the RAB is provisional until the end of CP4.⁵³

Renewals

4.21 Table 20 reconciles our PR08 determination renewals assumption to the renewals expenditure provisionally added to the RAB.

Table 20: Reconciliation of renewals RAB additions (£m, 2009-10 prices)

	GB	England & Wales	Scotland
PR08 determination	2,900	2,567	333
Deferrals from CP3 ⁵⁴	199	196	3
Delivery plan additions/reductions	-	-	-
Delivery plan re-classifications	-59	-60	1
Adjusted PR08 determination	3,040	2,703	337
Deferrals to later in CP4	-676	-572	-104
IOPI index adjustment	-78	-70	-8
Other adjustments	2	1	1
Adjustments for non-delivery of outputs	-	-	-
Adjustments for efficient over/under spend	1	3	-2
Total additions to RAB in 2009-10	2,289	2,065	224

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

Enhancements

4.22 Table 21 reconciles our PR08 determination enhancements assumption to the enhancements expenditure provisionally added to the RAB.

Network Rail's view of renewals efficiency in 2009-10, included in chapter 3 (efficiency), has changed since it published its estimate of its RAB in its 2009-10 regulatory accounts. If Network Rail's current view of renewals efficiency had been used to roll forward the RAB, the estimated value of the RAB would be different but it is not a material difference.

The deferrals from CP3 relate to the carry forward of renewal expenditure from CP3 to CP4 in relation to West Coast £100m, discretionary renewals £33m and other renewals £63m (all in 2008-09 prices) together with an adjustment for the seven day railway of £2m which was inadvertently omitted from our PR08 determination.

Table 21: Reconciliation of enhancements RAB additions (£m, 2009-10 prices)

	Great Britain	England & Wales	Scotland
PR08 determination	1,653	1,476	177
Deferrals from CP3 ⁵⁵	73	73	-
Delivery plan additions/reductions	-5	-5	-
Delivery plan re-classifications	59	60	-1
Adjusted PR08 determination	1,780	1,604	176
Deferrals to later in CP4	-740	-727	-13
Adjustments for non-delivery of outputs	-	-	-
Adjustments for efficient over/under spend	-4	-4	-
Other adjustments	3	-1	4
PR08 determination additions to the RAB Non-PR08 determination enhancements additions	1,039	872	167
to RAB	215	215	-
Total additions to RAB in year	1,254	1,087	167

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

Net debt

Movements in net debt

4.23 Table 22 below shows the movement in net debt in GB in 2009-10 in GB.

Table 22: Analysis of the movements in net debt in GB in 2009-10 (£m, in nominal prices)

	Actual 2009-10	Adjusted PR08 determination	2009 budget	Actual 2008-09	PR08 determination variance
	(A)	(B)	(C)	(D)	(B-A)
Opening net debt at 1 April 2009	20,890	21,267	21,132	19,381	377
Total income	-5,817	-5,681	-5,853	-6,212	136
Total expenditure	6,227	7,310	6,945	5,557	1,083
Financing costs	1,252	1,189	795	1,043	-63
Corporation tax	4	2	-	-	-2
Other	263	-	250	1,121	-263
Movement in net debt for 2009-10	1,929	2,820	2,137	1,509	891
Closing net debt at 31 March 2010	22,819	24,087	23,269	20,890	1,268

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

4.24 The closing net debt for the year of £22,819m is £1,268m lower than our PR08 determination. This is largely due to the underspend on renewals

The adjustments relate to the carry forward of enhancement expenditure from CP3 in relation to West Coast £40m, ERTMS £20m and Cab fitment £13m totalling £73m.

(£735m) as explained in chapter 2 (Expenditure), also Network Rail started CP4 with £377m lower net debt than we assumed in our PR08 determination.⁵⁶

- 4.25 Of the £263m of other movements in 2009-10, there was a movement of £265m as a result of a change in the definition of regulatory net debt. This change discloses debt on a Network Rail Infrastructure Limited group basis rather than the individual entity basis used in previous years e.g. debt is valued gross of issuance discounts.
- 4.26 Table 23 below shows the movements in net debt for England & Wales.

Table 23: Analysis of the movements in net debt for England & Wales (£m, nominal prices)

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (B-A)
Opening net debt at 1 April 2009	18,809	19,149	19,034	17,407	340
Total income	-5,256	-5,130	-5,308	-5,602	126
Total expenditure	5,593	6,576	6,244	5,056	983
Financing costs	1,135	1,070	711	939	-65
Corporation tax	4	2	0	0	-2
Other	236	0	309	1,009	-236
Movement in net debt for year	1,712	2,518	1,956	1,402	806
Closing net debt at 31 March 2010	20,521	21,667	20,990	18,809	1,146

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

- 4.27 The closing net debt for the year for England & Wales of £20,521m is £1,146m lower than our PR08 determination. This is largely due to the underspend on renewals (£624m) as explained in chapter 2 (Expenditure), also Network Rail started CP4 with £340m lower net debt than we assumed in our PR08 determination. The reason for the £236m of other movements in net debt is the same as for GB.
- 4.28 Table 24 below shows the movements in net debt for Scotland.

Generally, the movements in net debt reflect the movements in income and expenditure, so the explanations in the other chapters will also explain the movements in net debt. Where there is a timing difference between the receipt of income and the payment of expenditure and how it is recorded in the accounts, this is included in other category. More detail of expenditure variances is given in chapter 2, income variances are explained in chapter 5 and financing cost variances are further explained in this chapter. This will also apply to the analysis for England & Wales and Scotland.

Table 24: Analysis of the movements in net debt for Scotland (£m, nominal

prices)

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (B-A)
Opening net debt at 1 April 2009	2,081	2,118	2,099	1,974	37
Total income	-561	-551	-545	-610	10
Total expenditure	634	734	701	501	100
Financing costs	117	119	84	104	2
Corporation tax	0	0	0	0	0
Other	27	-	-60	112	-27
Movement in net debt for year	217	302	180	107	85
Closing net debt at 31 March 2010	2,298	2,420	2,279	2,081	122

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

4.29 The closing net debt for the year for Scotland of £2,298m is £122m lower than our determination. This is largely due to an underspend on renewals (£111m) as explained in chapter 2 (Expenditure), also in addition Network Rail started CP3 with £37m lower net debt than we assumed in our PR08 determination. The reason for the £27m of other movements in net debt is the same as for GB.

Other net debt issues

- 4.30 We analyse below the key net debt issues. These include:
 - (a) a reconciliation of regulatory net debt to statutory net debt;
 - (b) an analysis of the movement in net debt e.g. showing how much debt was raised in 2009-10;
 - (c) an analysis of the amount of index-linked debt and debt raised in a foreign currency;
 - (d) an analysis of the different types of debt included in net debt per Network Rail's statutory accounts; and
 - (e) an analysis of the maturity profile of Network Rail's gross debt.

The opening net debt PR08 assumption shown above is different to the opening net debt PR08 assumption in Network Rail's 2009-10 regulatory accounts due to an incorrect inflation adjustment being used in Network Rail's 2009-10 regulatory accounts.

4.31 Table 25 below reconciles regulatory net debt with statutory debt and statutory gross debt. The main reason for the difference between regulatory debt and statutory debt is that regulatory debt is valued at its historic cost e.g. the exchange rate at the time the loan is taken out, rather than its market value on the 31 March 2010. For statutory accounting purposes all derivatives are carried at their fair value. Certain derivatives have been designated as part of a hedge accounting relationship as set out in international accounting standards and this allows Network Rail to match gains and losses in the market value of the derivatives to the fluctuation in the hedged loan.⁵⁸

Table 25: Reconciliation of regulatory net debt to statutory net debt and statutory gross debt (£m, in 2009-10 prices)

Regulatory net debt at 31 March 2010	22,819
add back:	
change in fair value of net debt	544
foreign exchange differences	475
Statutory net debt at 31 March 2010	23,838
Add back: cash and finance leases	1,765
Total borrowings at 31 March 2010 (per statutory accounts)	25,603

Source: Network Rail's 2009-10 regulatory accounts and statutory accounts.

4.32 Table 26 provides an analysis of the different types of debt included in net debt per Network Rail's statutory accounts. It also identifies some debt related financial balances on derivatives, which Network Rail uses to reduce its exposure to foreign exchange risk and interest rate movements.⁵⁹

⁵⁸ This generally means marking the derivatives to market at the prevailing rates at the year end.

More detail of how Network Rail has hedged its financial position is given in Network Rail Infrastructure Limited's Annual Report and Accounts 2010, particularly notes 20 and 28. The derivative financial instruments Network Rail uses include currency swaps, interest rate swaps, gilt locks and real rate swaps.

Table 26: Analysis of statutory net debt and derivative financial instruments

(£m, in 2009-10 prices)

(2m, m 2000 to phood)		ı
	As at 31 March 2010	As at 31 March 2009
Cash and cash equivalents	2,321	1,723
less: cash collateral taken	-554	-1,062
Cash and cash equivalents	1,767	661
Obligations under finance leases	-2	-3
Cash and finance leases	1,765	658
Bank loans and overdrafts	-25,603	-22,965
Net Debt	-23,838	-22,307
Derivative financial instruments:		
Derivative financial instrument assets	999	1,398
Derivative financial instrument liabilities	-717	-479
Net value of derivatives instruments	282	919

Source: Network Rail's 2009-10 statutory accounts and our own calculations.

4.33 Table 27 analyses the increase in net debt in 2009-10 to show the debt that has been issued, the debt that has been repaid and debt that was raised but held as a cash balance to fund future costs or repay debt. As can be seen from table 29 Network Rail's debt matures regularly and needs to be refinanced, so Network Rail's normal borrowing requirement is to finance both the deficit on running the business and its debt refinancing programme.

Table 27: Analysis of the movements in net debt (£m, nominal prices)

Movement in net debt in 2009-10	
Regulatory net debt as at 31 March 2009	20,890
Regulatory net debt as at 31 March 2010	22,819
Increase in net debt in 2009-10	1,929
Represented by:	
New debt issued	4,053
Index-linked debt inflation (capital accretion)	347
Debt repaid	-1,416
Increase in net cash balances	-1,169
NR (CTRL) movement	105
Other	9
Increase in net debt in 2009-2010	1,929

Source: Network Rail's calculations and our own calculations.

4.34 Table 28 shows the breakdown of Network Rail's net debt identifying the amount of nominal debt, index-linked debt and debt raised in a foreign currency. As can be seen from the table Network Rail has increased its index-linked borrowing from 41% to 52% of its total borrowings.

Table 28: Analysis of Network Rail's net debt

	As at 31 March 2010		As at 31 March 2009	
	£m	% of total borrowing	£m	% of total borrowing
Nominal borrowings (GBP)	7,780	32%	7,948	37%
Nominal borrowings (Foreign currency)	4,163	17%	4,719	22%
Total nominal borrowings	11,943	48%	12,667	59%
Index-linked borrowings (GBP)	12,702	52%	8,985	41%
Total regulatory borrowings	24,645	100%	21,652	100%
NR (CTRL)	0		-105	
Uncleared cash items	-61		0	
Obligations under finance leases	2		3	
Net Cash balances	-1,767		-661	
Regulatory net debt as at 31 March	22,819		20,890	

Source: Network Rail's 2009-10 regulatory accounts and our own calculations.

4.35 Table 29 identifies the maturity profile of Network Rail's gross debt. 60

Table 29: Analysis of the maturity profile of Network Rail's gross debt (£m, in 2009-10 prices)

Maturity of debts:						
On demand or within one year	2,223					
Due within one to two years	2,360					
Due within two to five years	1,988					
Due in more than five years	19,032					
Total gross debt (as per statutory accounts)	25,603					

Source: Network Rail's 2009-10 regulatory accounts, statutory accounts and our own calculations.

Derivatives

- 4.36 Table 26 details the balances included at 31 March 2010 in Network Rail's statutory accounts relating to the value of derivative financial instruments at 31 March 2010.
- 4.37 The value of a derivative financial instrument can give rise to either an asset or a liability depending on how its price has changed since it was taken out. At 31 March 2010, the net value of the derivative instruments was an asset of £282m. However, Network Rail's intention is not to liquidate these derivatives until their related borrowing is repaid.

 $^{^{60}\,}$ This analysis is extracted from Network Rail's statutory accounts.

- 4.38 At 31 March 2010 the fair value of collateral held was £554m (2009: £1,062m). This is cash or eligible securities which counterparty banks have placed with Network Rail where they have exceeded their designated limited for the level of outstanding derivatives. Network Rail operate strict policies which limit exposures to each counterparty and this is one of the ways that they manage the credit risk related to these instruments.
- 4.39 The accounting rules around hedging and derivatives are very complex. Specifically, the notional gains or losses from the hedges which Network Rail take out to cover the real rate of interest (the interest rate excluding inflation) on future index-linked loans do not qualify to be hedge accounted. These gains or losses are accounted for at each reporting date, which means that Network Rail's profits are volatile, e.g. in the current year these losses amounted to £477m (2009: £72m). 62
- 4.40 Network Rail's intention is to hold the underlying debt and its hedging derivative until the maturity date of the debt. The notional gains and losses represent the difference between the rate Network Rail has used financial instruments to fix and the rate on a particular day. It is Network Rail's policy to hedge all foreign exchange exposures and at least 80% of all the interest cash flows in the control period. This protects against foreign exchange and interest rate risk. But it exposes Network Rail to market risk on the relevant financial instruments. Market risk is the possibility that future changes in foreign exchange rates or interest rates may make a derivative more or less valuable and as Network Rail uses derivatives for risk management, market risk relating to derivatives will principally be offset by changes in the valuation of the liability or transactions hedged.

Financing costs

4.41 The summary in table 30 shows that Network Rail has underperformed our PR08 determination by £63m. As table 31 shows this is partly due to Network Rail's average nominal interest rates (5.4%) being higher than assumed in our PR08 determination (5.0%) and Network Rail having more index-linked debt than assumed in our PR08 determination, which in 2009-10 was more costly

⁶¹ Source: Network Rail Infrastructure Limited Annual Report and Accounts note 26.

⁶² Source: Network Rail Infrastructure Limited Annual Report and Accounts note 8.

- than Network Rail's nominal debt in 2009-10, offset by average debt being lower than we assumed.
- 4.42 In 2009-10, Network Rail did not issue debt that is not guaranteed by the Government (i.e. unsupported debt). Our PR08 determination assumed that Network Rail would have issued £500m of unsupported debt in 2009-10 but given the recession, we agreed with Network Rail that conditions were not favourable in 2009-10. Network Rail still thinks that it is right to move away from relying on supported debt and is keeping the position under review. This means that in the table below there are no financing costs for unsupported debt.
- 4.43 Table 30 below summarises Network Rail's financing costs for GB for 2009-10.

Table 30: Summary of the financing costs for GB in 2009-10 (£m, in 2009-10 prices)

priocoj	Actual 2009-10	Determination	2009 budget	Actual 2008-09	PR08 determination variance
	(A)	(B)	(C)	(D)	(A-B)
Interest on nominal debt - FIM covered	581	681	629	790	-100
Interest on IL debt - FIM covered	150	112	132	97	38
FIM fee ⁶³	174	170	174	102	4
Total interest costs	905	963	935	989	-58
Accretion on IL debt - FIM covered	347	176	-140	54	171
Interest on nominal debt - unsupported	-	50	-	-	-50
Total financing costs (per Network Rail's regulatory accounts) ⁶⁴	1,252	1,189	795	1,043	63

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

4.44 Table 31 below summarises the average interest rates on Network Rail's debt. 65

Network Rail pays a fee to Government in respect of the financial indemnity mechanism. This was set at 80 basis points (that is, 0.8%) on the outstanding FIM-backed debt.

Financing costs per Network Rail's regulatory accounts of £1,252m, plus the expected return on assets less interest on liabilities in respect of the defined benefit pension scheme (£40m), less amounts included in the cost of qualifying assets (£95m) equal the total financing costs included in Network Rail's statutory accounts (£1,197m).

Network Rail raises debt on a GB basis so these average interest rates also apply for England & Wales and Scotland.

Table 31: Summary of average interest rates

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (A-B)
Average interest rate on nominal debt -					
FIM covered	5.4%	5.0%	5.0%	5.0%	0.4%
Average interest rate on nominal debt -					
unsupported	n/a	%	n/a	n/a	n/a
Average interest rate on IL debt					
- FIM covered	1.4%	1.5%	1.4%	1.4%	-0.1%
Accretion on IL debt					
- FIM covered ⁶⁶	4.4%	2.3%	-1.5%	-0.4%	2.1%
Total average interest rate on IL debt -					
FIM covered	5.8%	3.8%	-0.1%	1.0%	2.0%
FIM Fee rate	0.8%	0.8%	0.8%	n/a	0.0%

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

- 4.45 All of Network Rail's debt is raised on a GB basis. However, financing costs are allocated to England & Wales and Scotland based on the net debt allocated to both countries, for regulatory accounting purposes.
- 4.46 Table 32 below summarises Network Rail's financing costs for England & Wales for 2009-10. The overspend of £65m is largely due to the same reasons as the variance for GB.

Table 32: Summary of financing costs for England & Wales in 2009-10 (£m, in 2009-10 prices)

	Actual 2009-10 (A)	Adjusted PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (B-A)
nterest on nominal debt - FIM covered	526	614	561	711	88
nterest on IL debt - FIM covered	136	101	121	87	-35
FIM fee	158	153	157	92	-5
Total interest costs	820	868	839	890	48
Accretion on IL debt - FIM covered	315	158	-128	49	-157
nterest on nominal debt - unsupported	-	44	-	-	44
Total financing costs (per Network Rail's regulatory accounts)	1,135	1,070	711	939	-65

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

4.47 Table 33 summarises Network Rail's financing costs for Scotland for 2009-10. The underspend of £2m is due to the average net debt balance in 2009-10 being below our PR08 determination offset by Network Rail's average nominal

Network Rail's 2009 budget had assumed deflation of 1.5% in 2009-10. The actual movement in the RPI was an increase of 4.4%.

interest rates (5.4%) being higher than assumed in our PR08 determination (5.0%) and Network Rail having more index-linked debt than assumed in our PR08 determination, which in 2009-10 was more costly than Network Rail's nominal debt in 2009-10.

Table 33: Summary of financing costs for Scotland in 2009-10 (£m, in 2009-10 prices)

	Actual 2009-10 (A)	PR08 determination (B)	2009 budget (C)	Actual 2008-09 (D)	PR08 determination variance (B-A)
Interest on nominal debt - FIM covered	55	67	68	80	12
Interest on IL debt - FIM covered	14	11	11	10	-3
FIM fee	16	17	17	9	1
Total interest costs	85	95	96	99	10
Accretion on IL debt - FIM covered	32	18	-12	5	-14
Interest on nominal debt - unsupported	-	6	-	-	6
Total financing costs (per Network Rail's regulatory accounts)	117	119	84	104	2

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

Financial indicators

Introduction

- 4.48 We use financial indicators to help assess Network Rail's financeability at a periodic review. Table 34 below shows the two main financial indicators⁶⁷ that we used. One of the trigger points in the access charges contracts for Network Rail's access review to be re-opened is the adjusted interest cover ratio and Network Rail's network licence places limits on the level of net debt to RAB at a GB level. Both of these issues are discussed below.
- 4.49 The adjusted interest cover ratio is a measure of Network Rail's ability to pay the interest charges on its debt after taking account of all the business's running costs. It was a particularly important ratio for PR08 as the credit rating agencies tended to focus on this ratio.

⁶⁷ The definitions of each indicator are set out in the RAGs.

4.50 The net debt to RAB ratio measures the value of Network Rail's net debt against the value of its RAB i.e. Network Rail's gearing.

GB

4.51 Table 34 summarises the financial indicators for GB for 2009-10.

Table 34: Summary of the key financial indicators for GB

	Actual 2009-10	PR08 determination	2009 budget	Actual 2008-09
Adjusted interest cover ratio (AICR)	1.77	1.63	1.74	2.46
Net debt/RAB ratio ⁶⁸	63.9%	65.1%	64.2%	70.8%

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

- 4.52 The actual adjusted interest cover ratio of 1.77 in 2009-10 was 14 basis points better than we assumed in our PR08 determination because income was higher than the determination, maintenance expenditure was lower than the determination and interest costs (excluding capital accretion) were lower than the determination, this was offset by controllable opex and non-controllable opex being higher than the determination.
- 4.53 The net debt to RAB ratio at the end of 2009-10 is 63.9%. This is 1.2% better than our PR08 determination assumption of 65.1%, largely due to the movements in net debt and the RAB explained above. It is lower than the 70.0% limit in Network Rail's network licence for 2009-10.

England & Wales

4.54 Table 35 summarises the financial indicators for England & Wales for 2009-10.

Table 35: Summary of the key financial indicators for England & Wales for 2009-10

	Actual 2009-10	PR08 determination	2009 budget	Actual 2008-09	
Adjusted interest cover ratio (AICR)	1.77	1.63	1.78	2.45	
Net debt/RAB ratio	64.0%	65.2%	64.6%	70.0%	

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

Due to the agreed adjustments that are made to the closing RAB at the end of CP3, the value of the RAB is different at 31 March 2009 and 1 April 2009. The debt to RAB ratio in this table is calculated using the 31 March 2009 value of the RAB (in 2009-10 prices). As at 1 April 2009, the debt to RAB ratio would be 61.2% for GB. This issue also applies to England & Wales and Scotland.

- 4.55 The actual adjusted interest cover ratio of 1.77 in 2009-10 was 14 basis points better than we assumed in our PR08 determination because income was higher than the determination, maintenance expenditure was lower than the determination and interest costs (excluding capital accretion) were lower than the determination, this was offset by controllable opex and non-controllable opex being higher than the determination. The actual adjusted interest cover ratio is higher than the 1.4 trigger level in the access charges contracts, which means it does not trigger a re-opener.
- 4.56 The net debt to RAB ratio at the end of 2009-10 is 64.0%. This is 1.2% better than our PR08 determination assumption of 65.2%, largely due to the movements in net debt and the RAB explained above.

Scotland

4.57 Table 36 below summarises the financial indicators for Scotland for 2009-10.

Table 36: Summary of the main financial indicators for Scotland for 2009-10

	Actual 2009-10	PR08 determination	2009 budget	Actual 2008-09
Adjusted interest cover ratio (AICR)	1.69	1.67	1.39	2.53
Net debt/RAB ratio	62.6%	63.8%	61.0%	69.4%

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to us and our own calculations.

- 4.58 The actual adjusted interest cover ratio of 1.69 in 2009-10 was 2 basis points better than we assumed in our PR08 determination. The actual adjusted interest cover ratio is higher than the 1.4 trigger level in the access charges contracts, which means it does not trigger a re-opener.
- 4.59 The net debt to RAB ratio at the end of 2009-10 is 62.6%. This is 1.2% better than our PR08 determination assumption of 63.8%, largely due to the movements in net debt and the RAB explained above.

5. Income

Introduction

5.1 This chapter reviews Network Rail's income in 2009-10 for GB, England & Wales and Scotland. Comparisons are made with our PR08 determination assumptions and in some cases with Network Rail's own 2009 budget and actual 2008-09 figures.

Income in 2009-10

GB

- 5.2 Network Rail's income is comprised of track access charges, grant income and other single till income (OSTI) (including net income from schedule 4 and 8). Total income in 2009-10 for GB was £5,817m. This was:
 - £136m higher than our PR08 determination assumption;
 - £35m lower than Network Rail's assumption in its own 2009 budget;
 and
 - £412m less than income in 2008-09.
- 5.3 Table 37 shows the income for GB for 2009-10 broken down into the various high level income categories compared with our PR08 determination assumptions, Network Rail's own 2009 budget and actual 2008-09 figures.

Table 37: Comparison of actual income in 2009-10 for GB (£m, 2009-10 prices)

	Actual 2009-10 (A)	PR08 determination (B)	Budget 2009 (C)	Actuals 2008-09 (D)	PR08 determination variance (A-B)	2009 budget variance (A-C)	Prior year variance
	(A)	(6)	(0)	(D)	(A-B)	(A-C)	(A-D)
Franchised track access income	1,501	1,455	1,560	1,406	46	-59	95
Grant income	3,730	3,640	3,730	4,029	90	0	-299
Other single till income	586	586	562	794	0	24	-208
Total income	5,817	5,681	5,852	6,229	136	-35	-412

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 5.4 Actual income in 2009-10 was £136m higher than assumed in our PR08 determination. This was because:
 - franchised track access income⁶⁹ was £46m higher than we assumed in our PR08 determination largely because of higher traction electricity charges (£49m). The traction electricity charges were higher mainly because the actual price of electricity during the year, was more than we anticipated in our PR08 determination. This variance is largely offset by an increase in costs in non-controllable opex; and
 - grant income was £90m higher than we assumed in our PR08 determination. This is due to a difference between the inflation assumption in the deeds of grant with the Department for Transport and Transport Scotland and the uplift of our PR08 determination from 2006-07 prices to 2009-10 prices.
- 5.5 Actual income in 2009-10 was £35m lower than Network Rail assumed in its own 2009 budget. This was because:

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Franchised track access income includes fixed charges and variable charges. Variable charges include traction electricity charge, electrification asset usage charge, capacity charge, station usage charge and Schedule 4 and 8 income.

- the actual franchised track access income was £59m lower than Network Rail assumed in its own 2009 budget due to lower income from fixed track access charge and traction electricity charges; and
- this was offset by actual other single till income being £24m higher than Network Rail assumed in its own 2009 budget due to higher income from managed stations.⁷⁰ This was because the retail outlets at managed station performed better than expected.
- Total actual income in 2009-10 for GB was £412m less than actual income in 2008-09. This was mainly because of a reduction in the net revenue requirement and higher variable income. Also, other single till income in 2009-10 was £208m lower than in 2008-09, largely because of lower property income (£169m).
- 5.7 Table 38 shows other single till income for 2009-10 for GB broken down into the various categories compared with our PR08 determination assumptions and Network Rail's own 2009 budget and actual 2008-09 figures.

Table 38: Comparison of 2009-10 actual other single till income (£m, 2009-10 prices)

	Actuals 2009-10	PR08 determination	2009 Budget	Actuals 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(A-B)	(A-C)	(A-D)
Property income	99	113	107	268	-14	-8	-169
Freight income	52	72	47	93	-20	5	-41
Open access income	23	19	20	53	4	3	-30
Stations income	354	325	331	325	29	23	29
Depots income	54	50	53	52	4	1	2
Other	4	7	4	3	-3	0	1
Total other single till income	586	586	562	794	0	24	-208

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

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Stations income includes retail income, advertising income, concessions income, stations long term charge, qualifying expenditure, stations lease income and other income.

- 5.8 Total actual other single till income for 2009-10 was the same as we assumed in our PR08 determination. This was because the decrease in property income (£14m) and freight income (£20m) was largely offset by the increase in stations income (£29m).
- 5.9 Property income was £14m lower than we assumed in our PR08 determination because of the recession.
- 5.10 Freight income was £20m lower than our PR08 determination assumption because in our PR08 determination we assumed a significant increase in the volume of freight traffic that did not materialise, largely due to the recession.
- 5.11 Actual stations income was £29m higher than we assumed in our PR08 determination because:
 - the retail outlets at managed stations performed better than expected;
 and
 - the station long term charge was higher than our PR08 determination because of a difference between the inflation assumption in the access charges contracts and the uplift of our PR08 determination from 2006-07 prices to 2009-10 prices.
- 5.12 Actual other single till income for GB was £24m higher than Network Rail's own 2009 budget, largely because stations income was £23m higher than Network Rail's own 2009 budget. This was mainly as a result of the retail outlets at managed stations performing better than expected, largely due to the footfall at stations being better than expected and average revenue received per person was higher than Network Rail's budget assumption.
- 5.13 Actual other single till income in 2009-10 was £208m lower than 2008-09. This was because of lower income from property (£169m), freight (£41m) and open access (£30m) in 2009-10, offset by higher stations income (£29m). Property income this year was lower due to the recession. Freight income and open access income were lower, mainly because of the lower tariffs we set for CP4 and also due to lower freight and open access traffic on the network compared to last year as a result of the recession.

England & Wales

5.14 Total income in 2009-10 for England & Wales was £5,256m. This was:

- £126m higher than our PR08 determination;
- £52m lower than Network Rail's own 2009 budget; and
- £362m lower than income in 2008-09.
- 5.15 Table 39 shows the income for England & Wales for 2009-10 broken down into the various high level income categories compared with our PR08 determination assumptions, Network Rail's own 2009 budget and actual 2008-09 figures.

Table 39: Comparison of actual income in 2009-10 for England & Wales (£m, 2009-10 prices)

	Actuals 2009-10	PR08 determination	2009 budget	Actuals 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(A-B)	(A-C)	(A-D)
Franchised track access income	1,353	1,309	1,423	1,219	44	-70	134
Grant income	3,366	3,285	3,366	3,663	81	0	-297
Other single till income	537	536	519	735	1	18	-198
Total income	5,256	5,130	5,308	5,618	126	-52	-362

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 5.16 The actual income for England & Wales in 2009-10 was £126m higher than we assumed in our PR08 determination. This was largely because:
 - franchised track access income was £44m higher than we assumed in our PR08 determination largely because of higher traction electricity charges (£46m). The traction electricity charges were higher mainly because the actual price of electricity during the year, was more than

- we anticipated in our PR08 determination. This variance is largely offset by an increase in costs in non-controllable opex; and
- grant income was £81m higher than we assumed in our PR08 determination. This is due to a difference between the inflation assumption in the deeds of grant with the Department for Transport and the uplift of our PR08 determination from 2006-07 prices to 2009-10 prices.
- 5.17 Actual income in 2009-10 was £52m lower than Network Rail assumed in its budget 2009. This was because:
 - the actual franchised track access income was £70m lower than Network Rail assumed in its own 2009 budget. This was because of lower actual income from fixed track access charge (£37m) and traction electricity charge (£34m) than assumed in the budget; and
 - this was offset by other single till income being £18m higher than assumed in Network Rail's own 2009 budget due to higher income from managed stations. This was because the retail outlets at managed station performed better than expected.
- 5.18 Total actual income in 2009-10 for England & Wales was £362m less than actual income in 2008-09. This was mainly because of a reduction in the net revenue requirement and higher variable income. Also other single till income in 2009-10 was £198m lower than 2008-09, largely because of lower property income (£163m), freight income (£36m) and open access income (£30m) offset by higher stations income (£28m). Property income was lower this year due to the recession.
- 5.19 Table 40 shows other single till income for 2009-10 for England & Wales broken down into the various categories compared with our PR08 determination assumptions, Network Rail's own 2009 budget and actual 2008-09 figures.

Table 40: Comparison of other single till income in 2009-10 for England & Wales (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	2009 budget	Actuals 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(A-B)	(A-C)	(A-D)
Property income	88	107	100	251	-19	-12	-163
Freight income	47	62	42	83	-15	5	-36
Open access income	23	19	20	53	4	3	-30
Stations income	327	297	305	299	30	22	28
Depots income	48	44	48	46	4	0	2
Other	4	7	4	3	-3	0	1
Total other single till income	537	536	519	735	1	18	-198

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 5.20 Total actual other single till income for 2009-10 was £1m higher than we assumed in our PR08 determination. This was because the decrease in property income (£19m) and freight income (£15m) was largely offset by the increase in stations income (£30m).
- 5.21 Property income was £19m lower than we assumed in our PR08 determination because of the recession. Freight income was £15m lower than we assumed in our PR08 determination because in our PR08 determination we assumed a significant increase in the volume of freight traffic that did not materialise, largely due to the recession.
- 5.22 Actual stations income was £30m higher than we assumed in our PR08 determination largely because:
 - the retail outlets at managed stations performed better than expected;

- the station long term charge was higher than our PR08 determination because of a difference between the inflation assumptions in the access charges contracts and the uplift of our PR08 determination from 2006-07 prices to 2009-10 prices.
- 5.23 Actual total other single till income for England & Wales was £18m higher than Network Rail assumed in its own 2009 budget. This was because station income was £22m higher than the assumption in Network Rail's own 2009 budget, mainly as a result of retail outlets at managed stations performing better than expected.
- 5.24 Actual other single till income in 2009-10 was £198m lower than 2008-09, because of lower property income (£163m), freight income (£36m) and open access income (£30m) offset by higher stations income (£28m). Property income was lower this year due to the recession. Freight income and open access income were lower mainly because of the lower tariffs we set for CP4 and also due to lower freight and open access traffic on the network compared to last year as a result of the recession.

Scotland

- 5.25 Total income in 2009-10 for Scotland was £561m. This was:
 - £10m higher than our PR08 determination;
 - £17m higher than Network Rail's own 2009 budget; and
 - £51m less than income in 2008-09.
- 5.26 Table 41 shows the income for Scotland for 2009-10 broken down into the various high level income categories compared with our PR08 determination assumptions, Network Rail's own 2009 budget and actual 2008-09 figures.

Table 41: Comparison of income in 2009-10 for Scotland (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	Budget 2009	Actuals 2008-09	PR08 determination variance	2009 budget variance	Prior year
	(A)	(B)	(C)	(D)	(A-B)	(A-C)	(A-D)
Franchised track access income	148	146	137	187	2	11	-39
Grant income	364	355	364	366	9	0	-2
Other single till income	49	50	43	59	-1	6	-10
Total income	561	551	544	612	10	17	-51

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

- 5.27 The actual income for Scotland in 2009-10 was £10m higher than we assumed in our PR08 determination. This was largely because grant income was £9m higher than our PR08 determination assumption due to differences in the inflation assumed in the deed of grant with the Transport Scotland compared to that used to uplift our PR08 determination from 2006-07 prices.
- 5.28 Actual income in 2009-10 was £17m higher than Network Rail assumed in its own 2009 budget. This was because:
 - the actual franchised track access income was £11m higher than the budget. This was largely due to Schedule 4 payments being lower resulting in a saving of £7m. In addition, the track asset usage charge was £4m higher than Network Rail assumed in its budget. This indicates that the amount apportioned to Scotland in the budget for this income was not realistic.
 - this was offset by actual other single till income £6m being higher than Network Rail assumed in its own 2009 budget, largely because property sales were £4m higher than its own 2009 budget.

- 5.29 Total actual income in 2009-10 for Scotland was £51m less than actual income in 2008-09. This was mainly because of a reduction in the net revenue requirement and higher variable income. Also, other single till income in 2009-10 was lower than in 2008-09 mainly because of lower property income (£6m) and freight income (£5m). Property income was lower this year due to the recession.
- 5.30 Table 42 shows the other single till income for 2009-10 for Scotland broken down into the various categories compared with our PR08 determination assumptions, Network Rail's own 2009 budget and actual 2008-09 figures.

Table 42: Comparison of other single till income in 2009-10 for Scotland (£m, 2009-10 prices)

	Actual 2009-10	PR08 determination	2009 budget	Actuals 2008-09	PR08 determination variance	2009 budget variance	Prior year variance
	(A)	(B)	(C)	(D)	(A-B)	(A-C)	(A-D)
Property income	11	6	7	17	5	4	-6
Freight income	5	10	5	10	-5	0	-5
Open access income	-	-	-	-	-	-	ı
Stations income	27	28	26	26	-1	1	1
Depots income	6	6	5	6	0	1	0
Other	-	-	-	-	-	-	-
Total other single till income	49	50	43	59	-1	6	-10

Source: Network Rail's 2009-10 regulatory accounts, Network Rail submissions to ORR and our own calculations.

5.31 Actual other single till income for 2009-10 was £1m lower than we assumed in our PR08 determination. This was largely because the increase in property income (£5m) was offset by the decrease in freight income (£5m). Freight income was lower than our PR08 determination mainly because of the lower

- tariff we set for CP4 and also due to lower freight traffic on the network compared to last year as a result of the recession.
- 5.32 Actual total other single till income was £6m higher than Network Rail assumed in its own 2009 budget. This was because property income was £4m higher than Network Rail assumed in its own 2009 budget.
- 5.33 Actual other single till income in 2009-10 was £10m lower than in 2008-09 mainly because of lower property income (£6m) and freight income (£5m). Property income was lower this year due to the recession. Freight income was lower than our PR08 determination mainly because of the lower tariff we set for CP4 and also due to lower freight traffic on the network compared to last year as a result of the recession.

Network Rail's compliance with the de-minimis limits in 2009-10

- 5.34 De-minimis can be any activity that is not permitted business, subject to a cumulative cap of £210m (April 2006 prices) on the level of investments and an annual cap of £140m (April 2006 prices) on the level of turnover. Network Rail carries out de-minimis activities to help lower the total costs of running the network and having a de-minimis facility can reduce bureaucracy. We have also granted Network Rail a specific consent for £50m of property development activities and a consent for certain other property activities.
- 5.35 Table 43 below shows Network Rail's performance in 2009-10 against the various limits.

Table 43: Network Rail's compliance in 2009-10 with the limits set in the Licence, (£m, 2009-10 prices)

	Actuals 2009-10	Limits						
Licence condition								
Turnover (per annum)	6	151						
Investment (any point in time)	8	226						
Specific Consents								
Property development	8	50						
Property	37	Various limits						

Source: Network Rail.

5.36 As shown in table 43, in 2009-10, Network Rail's turnover and expenditure were below the de-minimis limits set out in its licence and our consents.

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Annex A: Historic information

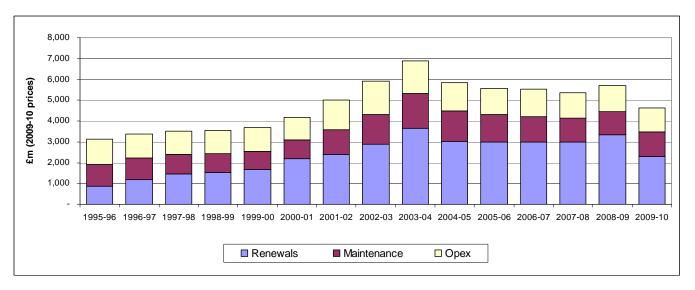
Introduction

1. This annex provides information about Network Rail's historic income, expenditure and efficiency. The information is for GB and where possible England & Wales and Scotland. More detail of Network Rail and Railtrack's income and expenditure can be found in their regulatory accounts, which are available on Network Rail's website.

Expenditure

2. The graph below shows actual OMR expenditure since 1995-96 in GB.

Graph 1: OMR expenditure since 1995-96 in GB



3. Tables 44, 45 and 46 below provide information about Network Rail's expenditure since 2002-03 and Railtrack's in 2001-02. The information is provided for GB and where possible England & Wales and Scotland.

Table 44: Historic expenditure for GB (£m, 2009-10 prices)

	Actual 2001-	Actual 2002-	Actual 2003-	Actual 2004-	Actual 2005-	Actual 2006-	Actual 2007-	Actual 2008-	Actual 2009-
	02	03	04	05	06	07	08	09	10
Controllable opex	Α	Α	Α	1,070	968	946	907	911	991
Non-controllable opex	Α	Α	Α	283	296	369	311	402	434
Total Opex	1,073	1,259	1,257	1,353	1,264	1,315	1,218	1,313	1,425
Maintenance	1,187	1,439	1,670	1,457	1,334	1,234	1,155	1,107	1,071
WCRM renewals	727	925	1,572	1,187	738	372	372	479	46
Non-WCRM renewals	1,657	1,957	2,068	1,853	2,238	2,605	2,617	2,673	2,258
Total Renewals	2,384	2,882	3,640	3,040	2,976	2,977	2,989	3,153	2,304
Enhancements:									
determination	Α	Α	Α	747	429	275	352	448	1,050
Enhancements:									
investment framework	Α	Α	Α	57	26	144	318	871	228
Total Enhancements	981	746	772	805	454	419	670	1,320	1,278

Note: For the years where we include A in the table, the information is not available.

Table 45: Historic expenditure for England & Wales (£m, 2009-10 prices)

	Actual 2005- 06	Actual 2006-	Actual 2007- 08	Actual 2008- 09	Actual 2009-
Controllable opex	882	858	825	827	896
Non-controllable opex	266	341	286	372	402
Total Opex	1,148	1,200	1,111	1,199	1,298
Maintenance	1,200	1,118	1,049	1,010	979
WCRM renewals	632	341	365	475	46
Non-WCRM renewals	2,031	2,317	2,340	2,386	2,032
Total Renewals	2,663	2,658	2,704	2,861	2,078
Enhancements:					
determination	429	255	341	435	877
Enhancements:					
investment framework	26	142	306	778	223
Total Enhancements	454	397	647	1,213	1,100

Table 46: Historic expenditure for Scotland (£m, 2009-10 prices)

Scotland £m (in 2009-10	Actual 2005-	Actual 2006-	Actual 2007-	Actual 2008-	Actual 2009-
prices)	06	07	08	09	10
Controllable opex	86	87	82	83	95
Non-controllable opex	30	28	25	30	32
Total Opex	116	115	106	113	127
Maintenance	133	116	105	97	92
WCRM renewals	106	30	7	4	0
Non-WCRM renewals	207	289	278	288	226
Total Renewals	313	319	285	292	226
Enhancements:					
determination	0	19	11	13	173
Enhancements:					
investment framework	0	2	12	93	5
Total Enhancements	0	22	24	106	178

Income

4. Table 47 below provides information about Network Rail's income since 2002-03 and Railtrack's in 2001-02. The information is provided for GB and where possible England & Wales and Scotland.

Table 47: Historic income for GB (£m, 2009-10 prices)

	Actual 2001- 02	Actual 2002- 03	Actual 2003- 04	Actual 2004- 05	Actual 2005- 06	Actual 2006- 07	Actual 2007- 08	Actual 2008- 09	Actual 2009- 10
Franchised Track Access	1,567	1,648	1,874	1,210	1,271	1,990	2,002	1,406	1,501
Grant Income	1,094	1,141	1,202	2,359	2,219	3,476	3,391	4,029	3,730
OST	887	858	785	829	854	838	838	794	586
Total Income	3,548	3,648	3,861	4,397	4,343	6,304	6,230	6,229	5,817

Table 48: Historic income for England & Wales(£m, 2009-10 prices)

	Actual 2005- 06	Actual 2006- 07	Actual 2007- 08	Actual 2008- 09	Actual 2009- 10
Franchised Track Access	1,192	1,819	1,824	1,219	1,353
Grant Income	1,953	3,103	3,019	3,663	3,366
OST	797	774	773	735	537
Total Income	3,942	5,697	5,616	5,618	5,256

Table 49: Historic income for Scotland (£m, 2009-10 prices)

Scotland £m (in 2009- 10 prices)	Actual 2005- 06	Actual 2006- 07	Actual 2007- 08	Actual 2008- 09	Actual 2009- 10
Franchised Track Access	79	171	178	187	148
Grant Income	265	373	372	366	364
OST	57	64	65	59	49
Total Income	402	607	615	612	561

Annex B: Reconciliation of the adjusted PR08 determination

Introduction

- 1. The tables below show the reconciliation of controllable opex, maintenance and renewals for GB, England & Wales and Scotland between Network Rail's strategic business plan (SBP), our PR08 determination and subsequent changes following our PR08 determination.
- The adjustments that we made as apart of our PR08 determination are generally set out in our PR08 determination and the post PR08 determination adjustments are discussed in more detail in the regulatory accounting guidelines.

Controllable opex

- 3. The table below shows the reconciliation of controllable opex for GB, England & Wales and Scotland between Network Rail's strategic business plan (SBP), our PR08 determination and subsequent changes following our PR08 determination.
- 4. Our PR08 determination adjustments in the table below were for insurance and pensions costs as set out in paragraph 6.33 of our final PR08 determination.⁷¹
- 5. In Network Rail's 2009-10 internal reporting it revised its allocation of costs between operating costs and maintenance. In order to more easily compare Network Rail's expenditure in 2009-10 with our PR08 determination, we have restated our PR08 determination operating cost and maintenance cost assumptions by making the post PR08 adjustment shown in the tables below.
- 6. This restatement has the effect in 2009-10 of increasing controllable opex by £65m and reducing maintenance by £65m and has no effect on Network Rail's income.

⁷¹ This is available at: http://www.rail-reg.gov.uk/upload/pdf/383.pdf.

Table 50: Calculation of the controllable opex adjusted PR08 determination for 2009-10 (£m, 2009-10 prices)

	SBP pre- efficient	ORR PR08 determination adjustments	ORR pre- efficient PR08 determination	ORR post efficient PR08 determination	Post PR08 determination adjustment	Adjusted PR08 determination
GB	844	-44	800	778	65	842
England & Wales	767	-40	727	707	59	766
Scotland	77	-4	73	71	5	76

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Maintenance

- 7. The table below shows the reconciliation of maintenance for GB, England & Wales and Scotland between Network Rail's strategic business plan (SBP), our PR08 determination and subsequent changes following our PR08 determination.
- 8. The post PR08 adjustment is explained above.

Table 51: Calculation of the maintenance adjusted PR08 determination for 2009-10 (£m, 2009-10 prices)

	SBP pre- efficient	ORR PR08 determination adjustments	ORR pre- efficient PR08 determination	ORR post efficient PR08 determination	Post PR08 determination adjustment	Adjusted PR08 determination
GB	1,157	58	1,214	1,176	-65	1,111
England & Wales	1,045	55	1,100	1,064	-59	1,005
Scotland	112	3	115	111	-5	106

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Renewals

 The table below shows the reconciliation of maintenance for GB, England & Wales and Scotland between Network Rail's strategic business plan (SBP), our PR08 determination and subsequent changes following our PR08 determination.

- 10. The post PR08 adjustments included in the table 52 are for the following issues:
 - (a) deferrals from CP3 to CP4 (£197m) in relation to West Coast £100m, discretionary renewals £33m and other renewals £63m (all in 2008-09 prices); and
 - (b) seven day railway expenditure of £2m, which was inadvertently omitted from our PR08 determination,

these adjustments are offset by delivery plan re-classifications (£59m). The delivery plan re-classifications are the adjustments to renewals and enhancements that we have agreed to, where delivery plan projects include both elements of renewal expenditure and elements of enhancement expenditure (known as 'mixed' projects). Enhancements as a result are £59m higher.⁷²

Table 52: Calculation of the renewals adjusted PR08 determination for 2009-10 (£m, 2009-10 prices)

	SBP pre- efficient	ORR adjustments	ORR pre- efficient	ORR post- efficient			determination	Adjusted PR08 determination
GB	3,122	-80	3,042	2,890	10	2,900	139	3,039
England & Wales	2,761	-69	2,693	2,558	9	2,567	135	2,702
Scotland	360	-11	349	332	1	333	4	337

Source: PR08 determination, Network Rail submissions to ORR and our own calculations.

Network Rail thinks that its infrastructure cost model did not include approximately £100m of capitalised overheads that should have been included. If Network Rail provides us with a satisfactory explanation and reconciliation of these costs, which we would expect to happen as part of the development of a robust unit cost monitoring framework for CP4, we will add the costs, including rolled-up financing costs, to the RAB at the start of CP5.